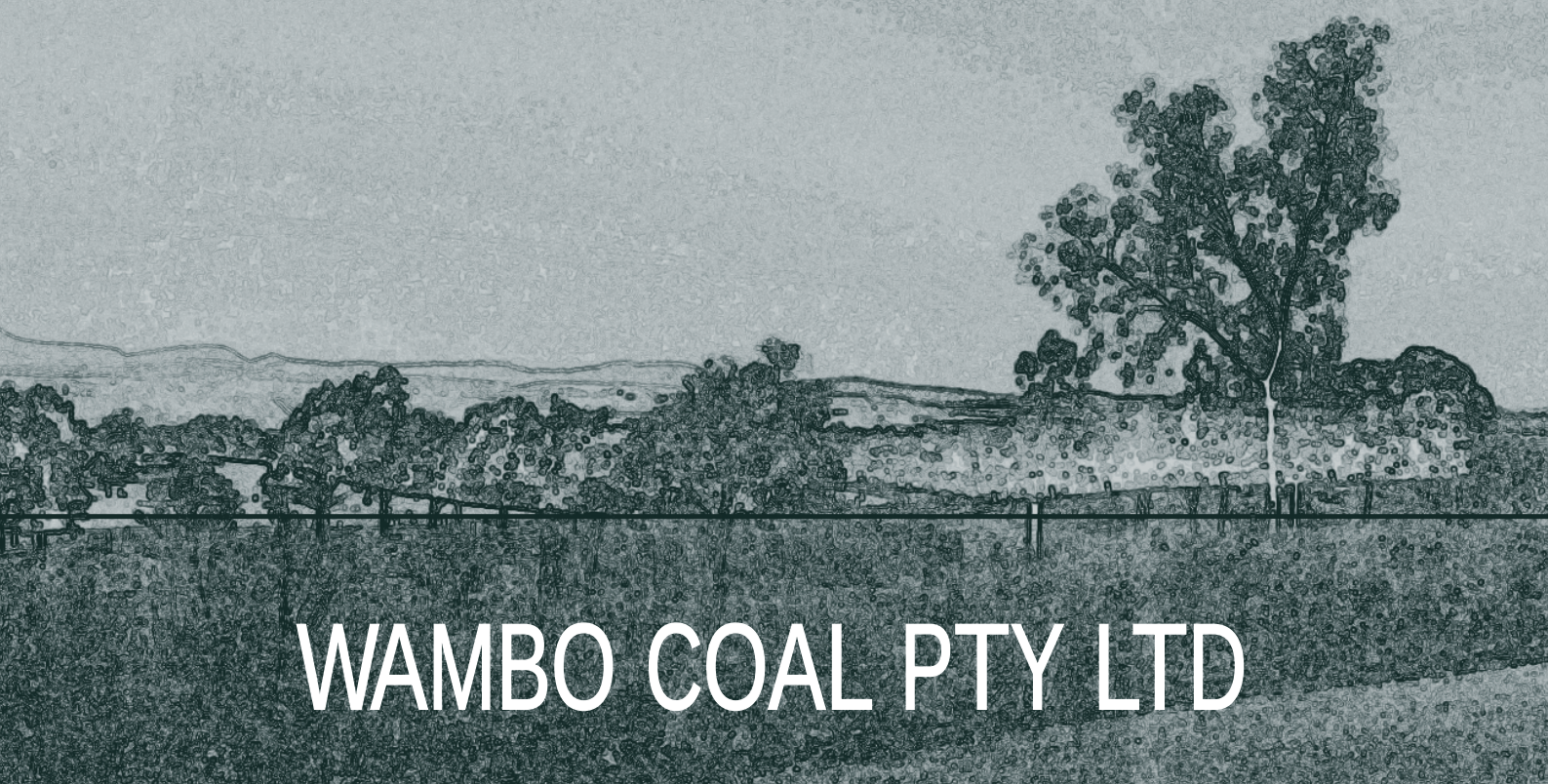




WAMBO COAL PTY LTD

NORTH WAMBO UNDERGROUND MINE LONGWALL 10A MODIFICATION ENVIRONMENTAL ASSESSMENT

APPENDIX D Cultural Heritage Impact Assessment



Cultural Heritage Impact Assessment

North Wambo Underground Mine Longwall 10A Modification

Nearest Town: Warkworth
Local Government Area: Singleton

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Final / Date: August 2014

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Executive Summary

RPS Australia East Pty Ltd (RPS) has been commissioned by Wambo Coal Pty Ltd (WCPL) to prepare an Aboriginal and non-Indigenous Cultural Heritage Impact Assessment (CHIA) for a proposed minor modification to WCPL's existing Development Consent (DA 305-7-2003). An overarching Environmental Assessment (EA) will be prepared to support an application to modify the Wambo Development Consent (DA 305-7-2003) to allow for an extension to the approved North Wambo Underground Mine (NWUM), referred to as the North Wambo Underground Mine Longwall 10A Modification. This CHIA will form part of the overarching EA.

Mining under Development Consent DA 305-7-2003 commenced in 2004 and currently both open cut and underground operations are conducted. The approved run-of-mine (ROM) coal production rate is 14.7 million tonnes per annum and product coal is transported from Wambo by rail.

The Modification would include the development of an additional longwall panel (Longwall 10A) in the Wambo Seam adjacent to the existing NWUM. Access to the additional longwall panel would be via the existing NWUM. The Modification would use the existing surface infrastructure of the NWUM. The Modification would produce additional ROM coal, however there would be no change to the currently approved ROM coal production rate or the approved mine life.

The Modification Project Area is situated to the west of Wollombi Brook, south of North Wambo Creek, with Wambo Creek (also known as South Wambo Creek) and Stony Creek traversing the southern boundary. The proposed Modification is wholly within the Wambo mining tenements, namely Consolidated Coal Lease 743 and Mining Lease 1594.

The CHIA considers the environmental and archaeological context of the Modification Project Area, results from a search of the Aboriginal Heritage Information Management System (AHIMS) database, the provision of a predictive model, comments from the Registered Aboriginal Parties (RAPs) regarding cultural heritage significance and the results of the archaeological and cultural survey of the Modification Project Area.

The desktop study revealed that a number of major archaeological field surveys had previously been undertaken in the area, including, but not limited to, the following:

- Preliminary Survey for Archaeological Sites at South Wambo (Corkill 1990);
- Aboriginal Sites at Wambo, near Bulga in the Hunter Valley (Rich 1991a);
- Investigation of Aboriginal Sites SW3 and SC4 at South Wambo, near Bulga, NSW (Rich 1991b);
- Proposed Open Cut and Underground Mining at Wambo near Warkworth in the Hunter Valley, NSW: Archaeological Survey for Aboriginal sites (Rich 1991c);
- Aboriginal Heritage Assessment for the Wambo Development Project: Environmental Impact Statement (White 2003); and
- Cultural Heritage Impact Assessment: North Wambo Underground Mine Modification (RPS 2012).

These studies identified a number of sites in both the local and regional area. An Aboriginal cultural heritage field survey for the North Wambo Underground Mine Modification (RPS 2012) inspected sites previously identified by White (2003). A number of new sites were recorded. The majority of Aboriginal cultural heritage sites in this area were located on elevated areas above the floodplain associated with Wollombi Brook, North Wambo Creek, Wambo Creek and Stony Creek.

Following consultation with the RAPs, an additional two day archaeological and cultural heritage field survey of the Modification Project Area was conducted on 5 and 6 June 2014 by Senior Archaeologists Gillian Goode and Laraine Nelson of RPS, in partnership with representatives from a number of RAPs. Rostered groups who participated in the survey on the 5 June 2014 included Culturally Aware, Lower Hunter Wonnarua Council Inc (also known as Lower Hunter Wonnarua Cultural Services), Maree T/A Wallangan Cultural Services, Wattaka Wonnarua Cultural Consultancy Services, Wonnarua Culture Heritage; and those who participated in the survey on the 6 June 2014 were Carcatchua Pty Ltd (previously known as Cacatua Culture Consultants), Ungooroo Cultural and Community Services, Ungooroo Aboriginal Corporation and Wonnarua Nation Aboriginal Corporation. Wambo Environment & Community Coordinator David Rankin from Wambo also attended the survey.

There are 9 artefact sites in the Modification Project Area; five of which were artefact scatters previously recorded in AHIMS database and four isolated finds which were identified during the recent field survey (5 and 6 June 2014). No Aboriginal Places have been registered within the Modification Project Area.

The five artefact scatters had been previously recorded with AHIMS in the Modification Project Area: (AHIMS #37-5-0195 [incorporates Wambo Sites 40, 41, 42], AHIMS #37-5-0644 [Wambo Site 336], and AHIMS #37-5-0625 [Wambo Site 363]). The four isolated find sites identified during the recent survey were recorded in the north-eastern part of the Modification Project Area: AHIMS #37-5-0647 (Wambo Site 371), #37-5-0648 (Wambo Site 372), #37-5-0649 (Wambo Site 373) and #37-5-0650 (Wambo Site 374).

All nine Aboriginal Cultural Heritage sites (artefact sites) that are in the Modification Project Area were ranked as having low archaeological significance except for Wambo Site 336 (artefact scatter) which was considered moderately significant at a local level. There were a number of additional sites identified and/or discussed which are located outside the Modification Project Area, the specifics of which have been discussed in Sections 6.0 and 7.0.

During the June 2014 survey, areas that had previously been subject to longwall mining were inspected and the effects of subsidence in these areas viewed to assist in understanding the potential subsidence effects on artefact sites in the current Modification Project Area. On the basis of subsidence effects viewed in the area, it was determined by the RAPs present, that if subsidence impacts were low, then it was unlikely that artefact sites would suffer impact. However, where subsidence predictions were moderate to high then the artefact sites could be impacted on by downward movement due to vertical subsidence (whereby the land surface moves downwards as a whole). The RAPs recommended that artefact scatters and isolated finds not be moved unless required. They considered that if impact to specific sites was likely, then those sites should be salvaged under an appropriate permit. A variation to the existing s87-s90 Aboriginal Heritage Impact Permit (AHIP) Consent 2222 would be required for Aboriginal cultural heritage sites within the Modification Project Area that may suffer impact and which are located outside the extent of the existing Consent 2222. It was also recommended that periodic monitoring of the sites be maintained by WCPL to mitigate against potential site damage from subsidence impacts.

Subsidence estimates for the Modification Project Area (including specific predictions for Aboriginal cultural heritage sites) have been provided by Mine Subsidence Engineering Consultants [MSEC] (2014). It is noted that the Modification Project Area and its surrounds has either previously been undermined or has existing approval to be undermined.

MSEC (2014:55-59) calculated the maximum predicted additional subsidence parameters for the archaeological sites in the Modification Project Area for approved mining in the Wambo, Arrowfield and Bowfield Seams (Approved Layout) and compared them to the predicted values for the proposed NWUM LW10A (Modified Layout).

The predicted maximum incremental changes in subsidence resulting from the proposed Modification at any Aboriginal site within the Modification Project Area ranged from 0 millimetres (mm) to 1500 mm; in tilt ranged from 0 millimetres per metre (mm/m) to 30 mm/m; in hogging curvature ranged from 0.0 km⁻¹ to 2.50 km⁻¹; and in sagging curvature ranged from 0.0 km⁻¹ to 2.90 km⁻¹ (MSEC 2014:58).

As such, MSEC (2014) predicted that the additional subsidence effects in the vicinity of known Aboriginal cultural heritage sites within the Modification Project Area would not exceed 1,500 mm and was significantly lower for the majority of Aboriginal cultural heritage sites ranging from 0 mm to 1500 mm. MSEC (2014:58) considered that the artefact scatters and isolated find sites identified within the Modification Project Area could potentially be affected by cracking of the surface soils as a result of mine subsidence movements, but that it would be unlikely that the stone artefacts at these sites would be impacted by the surface cracking (MSEC 2014). Stone artefacts in this area would therefore only be likely to be affected by vertical subsidence.

The Wollemi National Park escarpment cliff lines and steep talus slopes are more than two kilometres from the Modification Project Area and are well outside of the predicted subsidence impact area (MSEC 2014:40). It is not expected that the proposed Modification would have an adverse impact on the Wollemi National Park or the associated escarpment (MSEC 2014:40). Wollombi Brook is situated outside of the Modification Project Area and lies approximately 125 metres to the east of the closest end of Longwall 10A. It is considered by MSEC that it is unlikely that Wollombi Brook would experience any adverse impacts as a result of the proposed Modification (MSEC 2014: 35).

While impacts to archaeological and cultural heritage within the Modification Project Area are predicted to be moderate to low, it is recommended that, if required, WCPL would vary the existing Consent 2222 (s87 and s90 consent to carry out the destruction of an Aboriginal object/place and permit to collect and excavate for the purpose of salvage) under Section 90 of the *National Parks and Wildlife Act, 1974* to allow for the salvage of registered and unregistered Aboriginal cultural heritage sites (should they be uncovered) in consultation with the relevant RAPs. If salvage is required, then it is recommended that artefacts be transferred to the temporary keeping place under the existing Care and Control Permit (#3130) in consultation with the relevant RAPs.

The management recommendations have been formulated with consideration of the significance of Aboriginal heritage, as well as potential impacts, and have been prepared in accordance with the relevant legislation.

Aboriginal Cultural Heritage:

Recommendation 1

It is recommended that the artefacts remain *in situ* unless impact to the sites is unavoidable. It is further recommended that WCPL undertakes subsidence monitoring to ensure that subsidence effects meet the predicted impacts so that Aboriginal objects are not harmed.

Recommendation 2

It is recommended that Aboriginal objects within the existing Consent 2222 boundary be managed in accordance with the terms and conditions of that Consent. Such works must be undertaken in consultation with the RAPs and artefacts collected should be transferred to the temporary keeping place under the existing Care and Control Permit (#3130). It is further recommended that the existing Consent 2222 be varied to include the extent of the Modification Project Area.

Recommendation 3

The location of any Aboriginal cultural heritage sites in the Modification Project Area should be included in the WCPL environmental management framework for the Modification Project Area, so that all relevant staff members are aware that these areas will require management.

In General during the Course of Wambo Works:

Recommendation 4

If any previously unrecorded Aboriginal sites are identified during the course of surface works in the Modification Project Area, the area should be cordoned off and surface works cease until the site has been adequately recorded. Any newly identified sites should be managed in accordance with management measures for similar site/artefact types previously identified within the Modification Project Area or across the wider Wambo area, in consultation with the RAPs.

Recommendation 5

In the event that skeletal remains are uncovered, work must cease immediately in that area and WCPL will need to contact the NSW Police Coroner to determine if the material is of Aboriginal origin. If the remains are determined to be Aboriginal, WCPL must then contact the NSW Office of Environment and Heritage (OEH) Enviroline 131 555 and the RAPs in order to determine an action plan for the management of the skeletal remains prior to works re-commencing.

Indigenous and non-Indigenous Cultural Heritage:

Recommendation 6

All relevant WCPL staff should be made aware of their statutory obligations for heritage under *National Parks and Wildlife Act 1974* and the *Heritage Act 1977*, which may be implemented as a heritage induction. If during the course of surface site works significant European cultural heritage material is uncovered, surface work should cease in that area immediately. OEH should be notified and works only recommenced when an appropriate and approved management strategy has been instigated.

Terms and Abbreviations

Abbreviation	Description
Aboriginal cultural heritage site	Refers to sites under the <i>National Parks and Wildlife Act 1974</i> that contain Aboriginal objects
ACHCRs	<i>Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010</i> (DECCW, 2010a) were released by the DECCW on 12 April, 2010. These consultation requirements are triggered for assessments under Part 3A for the EP&A Act, or if an AHIP is required under Parts 4 or 5 of the EP&A Act, or if archaeological investigations are required in accordance with the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales</i> (DECCW, 2010b)
AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
BP	Before present (as in years before present)
cal. Years BP	Calibrated years before present, indicates a radiocarbon date has been calibrated using the dendochronology curves, making the date more accurate than an uncalibrated date
CHIA	Cultural Heritage Impact Assessment
Consent 2222	s87 and s90 consent to carry out the destruction of an Aboriginal object/place and permit to collect and excavate for the purpose of salvage
DA	Development Application
DGPS	Differential Global Positioning System
DECCW	Department of Environment, Climate Change and Water
EA	Environmental Assessment
EIS	Environmental Impact Statement
EoI	Expression of Interest
km	Kilometres
LEP	Local Environmental Plan
LGA	Local Government Area
MOL	Mine Owned Land
NSW	New South Wales
NWUM	North Wambo Underground Mine
OEH	Office of Heritage and Environment
PAD	Potential Archaeological Deposit
RAPs	Registered Aboriginal Parties
ROM	run-of-mine
RPS	RPS Australia East Pty Ltd
Wambo	Wambo Coal Mine
WCPL	Wambo Coal Pty Ltd

1.0 Introduction

The Wambo Coal Mine (Wambo) is owned and operated by Wambo Coal Pty Ltd (WCPL), a subsidiary of Peabody Energy Australia Pty Limited. Wambo is situated at Warkworth in the Singleton Local Government Area (LGA). Wambo is located approximately 15 kilometres (km) west of the township of Singleton, near the village of Warkworth in the Hunter Valley, New South Wales (NSW) (**Figure 1**). Wambo adjoins grazing land to the south, other coal mining operations to the east and north, grazing land to the north-west and the Wollemi National Park to the west and south-west.

RPS Australia East Pty Ltd (RPS) has been commissioned by WCPL to prepare an Aboriginal and non-Indigenous Cultural Heritage Impact Assessment (CHIA) for a proposed minor modification to WCPL's existing Development Consent (DA 305-7-2003). An overarching Environmental Assessment (EA) will be prepared to support an application to modify the Wambo Development Consent (DA 305-7-2003) to allow for an extension to the approved North Wambo Underground Mine (NWUM), referred to as the North Wambo Underground Mine Longwall 10A Modification (**Figure 2**). This CHIA will form part of the overarching EA.

The North Wambo Underground Mine Longwall 10A Modification is herein referred to as the Modification. The Modification would include the development of an additional longwall panel (Longwall 10A) in the Wambo Seam adjacent to the existing NWUM (**Figure 2**). Access to the additional longwall panel would be via the existing NWUM (**Figure 3**). The Modification would use the existing surface infrastructure of the NWUM. The proposed Modification is wholly within the Wambo mining tenements, namely Consolidated Coal Lease 743 and Mining Lease 1594. The proposed Modification affects part of Lots 1 and 2 in DP110084 and part of Lot 83 in DP548749 in the Parish of Whybrow and the County of Hunter (**Figure 4**). The Modification would produce additional run-of-mine (ROM) coal however there would be no change to the currently approved ROM coal production rate or the approved mine life.

The objectives of this CHIA are to provide an assessment of the proposed Modification for Aboriginal heritage values, to identify whether Aboriginal sites, objects or places would be impacted by the proposed works, and to provide appropriate mitigation and management recommendations, where required.

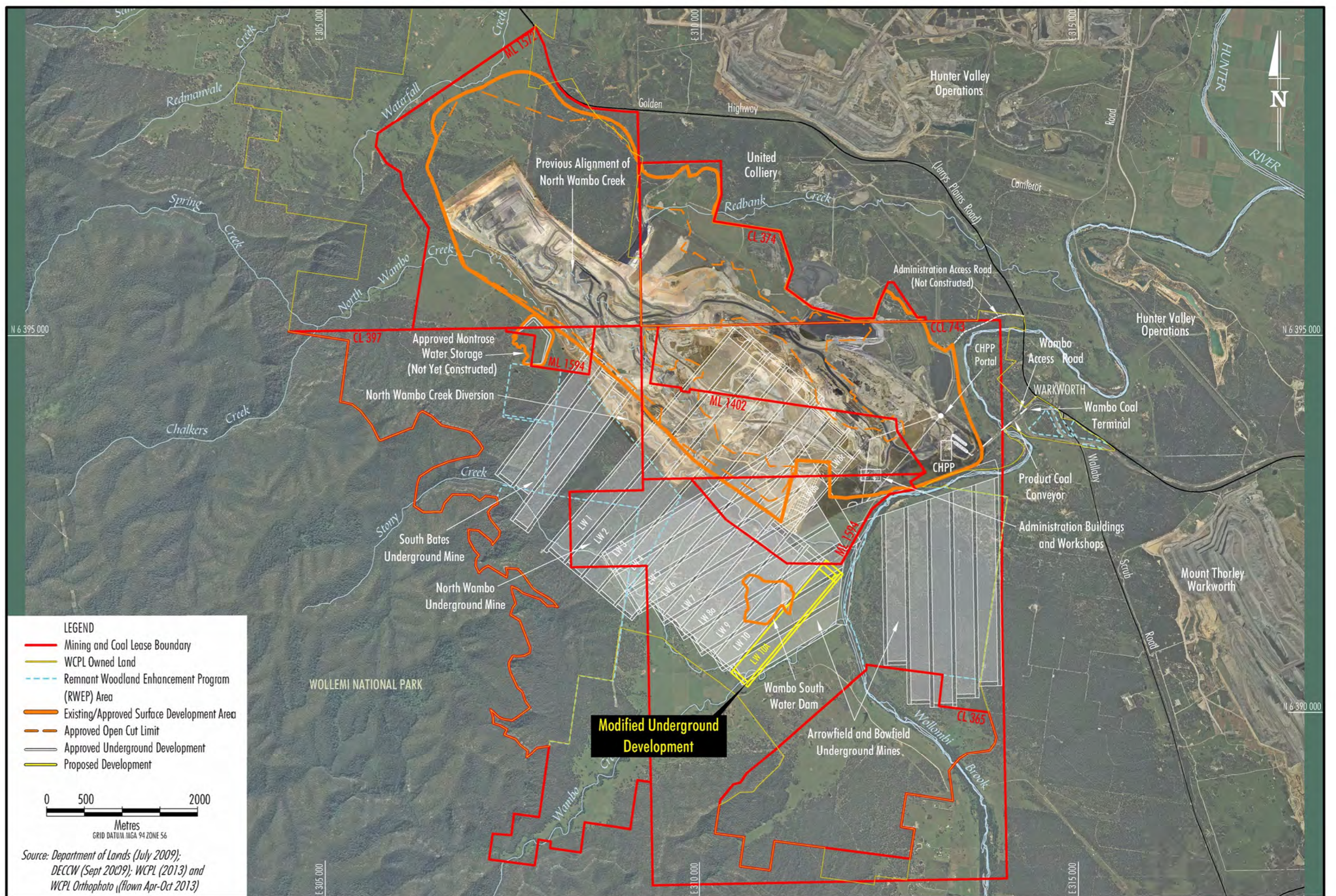
This CHIA has considered the environmental and archaeological context of the Modification Project Area, developed a predictive model and reported on the results of an archaeological survey of the Modification Project Area.

Management recommendations have been formulated with consideration of the archaeological and cultural significance of Aboriginal heritage and potential impacts of the works, and have been prepared in accordance with the relevant legislation (Section 1.3).

1.1 The Modification Project Area

The Modification Project Area is situated to the west of Wollombi Brook, south of North Wambo Creek, with Wambo Creek (also known as South Wambo Creek) and Stony Creek traversing the southern boundary (**Figure 3**). Longwall 10A is located in the south eastern portion of the existing approved NWUM. The Modification Project Area is predominantly floodplain and slopes gently to the south-west. The floodplain area is associated with the major creek lines that bound the Modification Project Area, namely North Wambo Creek to the north, Wollombi Brook to the east and Wambo Creek and Stony Creek to the south and there is evidence of previous repeated and extensive flooding events in this area.

RPS



TITLE: FIGURE 2: WAMBO COAL MINE APPROVED UNDERGROUND DEVELOPMENT

LOCATION: NORTH WAMBO LW10A MODIFICATION

DATUM: (GDA 94)
PROJECTION: MGA ZONE 56

DATE: 2/07/2014
PURPOSE: HERITAGE

VERSION (PLAN BY): B A4 (GG-NW)
PATH: J:\JOBS\Wambo\Wambo Mapping Database\Archaeology\108453-3

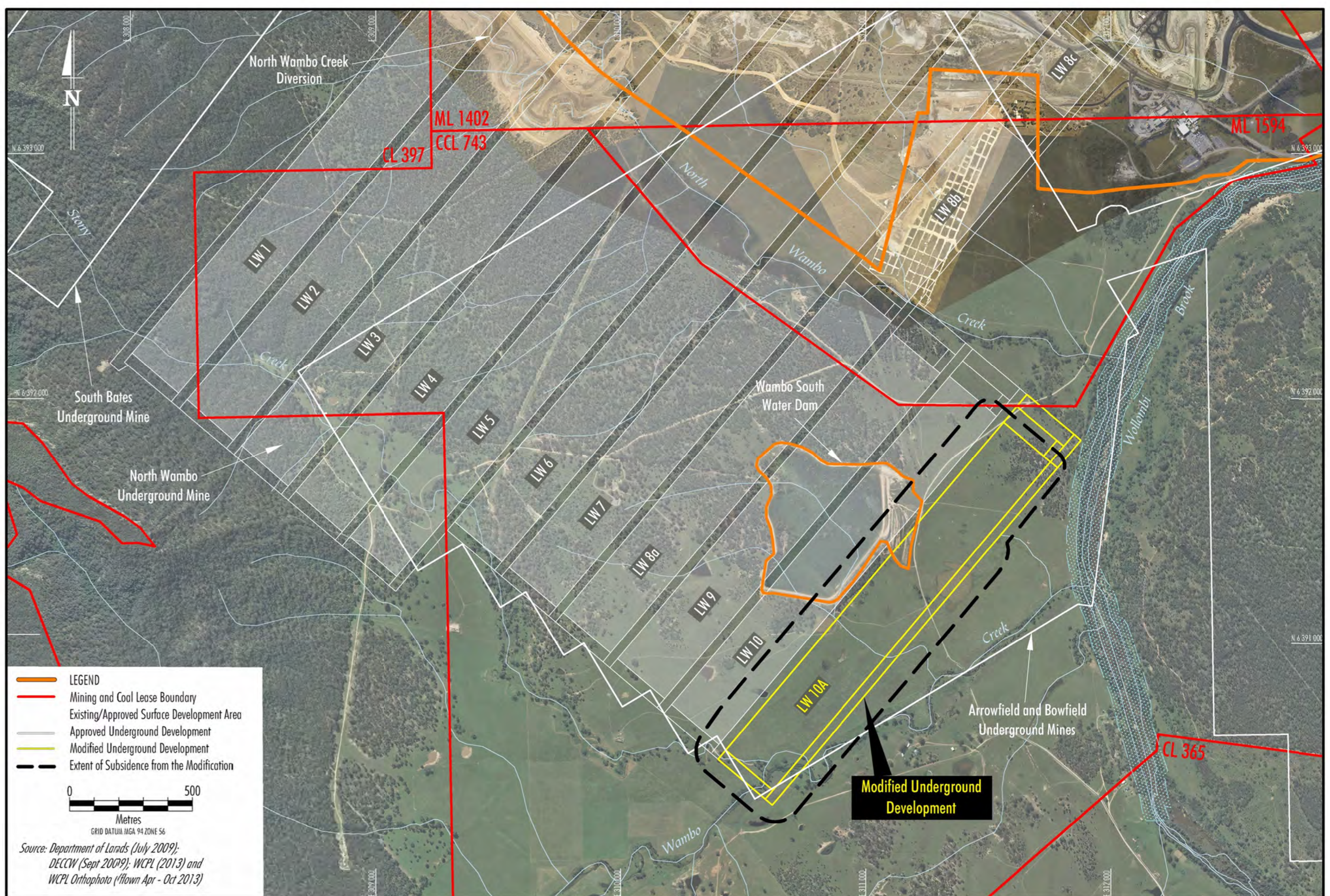
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TITLE: FIGURE 3: PROPOSED LONGWALL 10A
MODIFICATION

LOCATION: NORTH WAMBO
LW10A MODIFICATION

DATUM: (GDA 94)
PROJECTION: MGA ZONE 56

DATE: 2/07/2014
PURPOSE: HERITAGE

VERSION (PLAN BY): B A4 (GG-NW)
PATH: J:\JOBS\Wambo\Wambo Mapping Database
Archaeology\108453-3

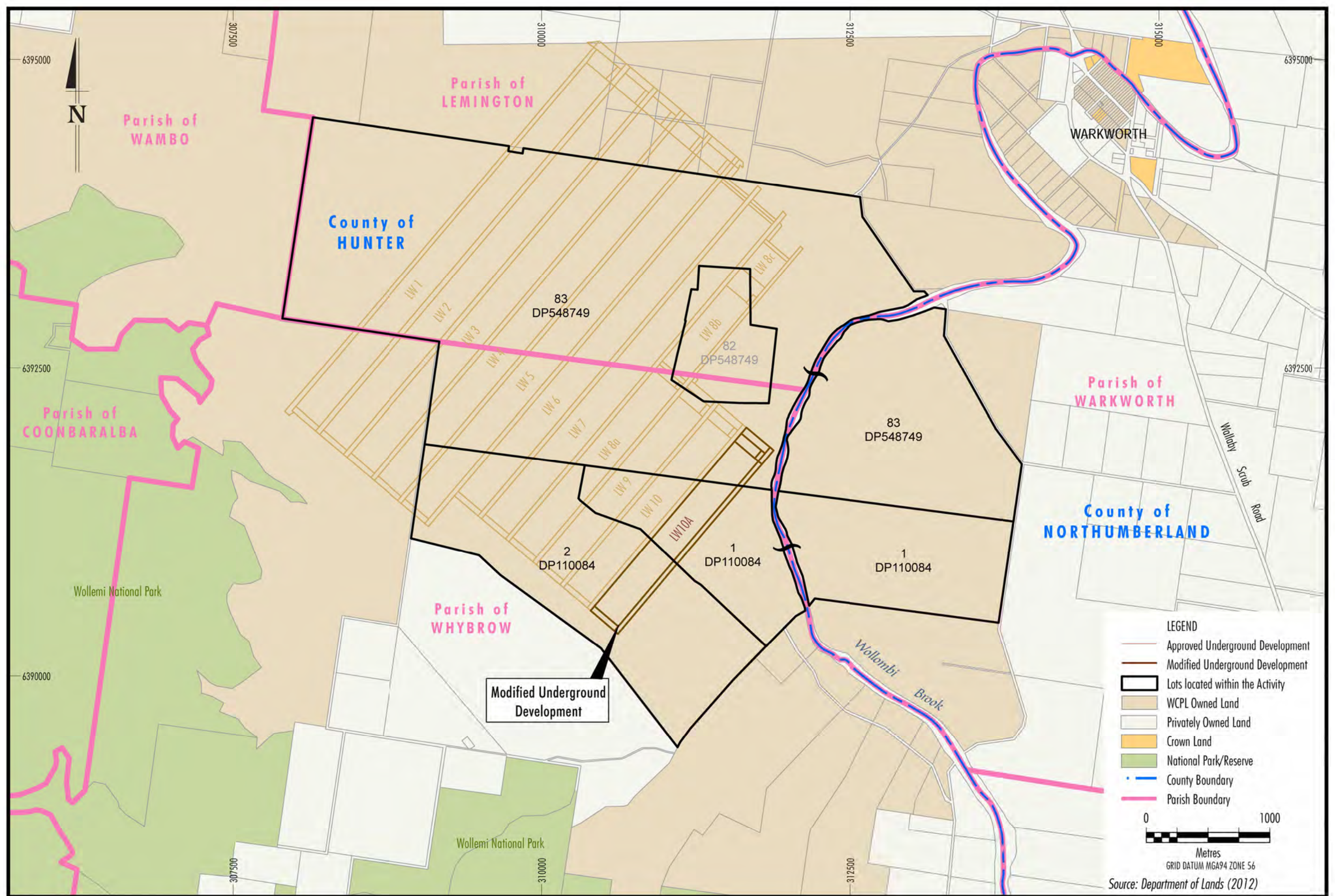
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TITLE: FIGURE 4: LOTS WITHIN MODIFICATION

LOCATION: NORTH WAMBO
LW10A MODIFICATION

DATUM: (GDA 94)
PROJECTION: MGA ZONE 56

DATE: 01/07/2014
PURPOSE: HERITAGE

VERSION (PLAN BY): A A4 (GG-NW)
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CLIENT: WAMBO COAL PTY LTD
JOB REF: 108453-3

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The Modification Project Area does not include any part of the Wollemi National Park or associated escarpment and does not impact on Wambo Homestead, Wollombi Brook or North Wambo Creek. The Modification Project Area includes a portion of Wambo Creek and Stony Creek.

1.2 Background

RPS has been commissioned by WCPL to undertake an Aboriginal and non-Indigenous CHIA as part of an application to modify Development Consent (DA 305-7-2003) for Wambo, under Section 75W of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

The proposed Modification will include development of an additional longwall panel (Longwall 10A) in the Wambo Seam contiguous with the existing NWUM. The Modification would use the existing surface infrastructure of the NWUM. Longwall extraction of the proposed Longwall 10A is scheduled to commence in May 2015, and ROM coal would be extracted over a period of 4 to 5 months.

The Modification Project Area has been highly modified and disturbed from previous farming practices including, but not limited to, the installation of fencing and dams, livestock grazing, land clearing, formed tracks and dirt access roads. Much of the area has also been previously undermined by historic bord and pillar and longwall mining.

The Modification Project Area generally has a south-west facing aspect and covers an area of approximately 1,900 m long by 500 m wide. The Modification Project Area is generally flat lying or gently sloping, encompassing floodplain, creek banks, lower and mid slope areas. Wambo mine owned land (MOL) and private land is bordered by Wambo and Jerrys Plains Ridges and adjoins Wollemi National Park.

This CHIA has been prepared to meet the requirements for the application by WCPL for a 75W modification to an existing Part 4 approval. The report considers the environmental and archaeological context of the Modification Project Area, results from a search of the Aboriginal Heritage Information Management System (AHIMS) database, the provision of a predictive model, comments from the Aboriginal community regarding cultural heritage significance and the results of the archaeological and cultural survey of the Modification Project Area.

This Aboriginal and non-Indigenous CHIA report has been prepared in accordance with the following guidelines:

- *Aboriginal cultural heritage consultation requirements for proponents 2010* (NSW Department of Environment, Climate Change and Water NSW [DECCW] 2010a) (the ACHCRs);
- *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b);
- *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (NSW Office of Environment and Heritage [OEH] 2011); and
- Burra Charter (Australia International Council on Monuments and Sites [ICOMOS] 2013).

1.3 Legislative Context

The following overview of the legal framework is provided solely for information purposes for the client, it should not be interpreted as legal advice. RPS will not be liable for any actions taken by any person, body or group as a result of this general overview, and recommends that specific legal advice be obtained from a qualified legal practitioner prior to any action being taken as a result of the summary below.

Aboriginal heritage (e.g. Aboriginal places, sites and objects) in NSW are protected by the *National Parks and Wildlife Act 1974 (as amended)*, which is overseen by the OEH. In some cases, Aboriginal heritage may also be protected under the *Heritage Act 1977*, which is overseen by the NSW Heritage Branch of the OEH. The EP&A Act, along with other environmental planning instruments, requires the investigation and assessment of Aboriginal heritage as part of the development approval process. For Crown Land, provisions under the *Aboriginal Land Rights Act, 1983* and the *Commonwealth Native Title Act 1993* (overseen by the Office of the Registrar, *Aboriginal Land Rights Act 1983*) may also apply.

1.3.1 National Parks and Wildlife Act 1974, as amended

The primary state legislation relating to Aboriginal cultural heritage in NSW is the *National Parks and Wildlife Act 1974 (as amended)*. The NSW Government is working towards standalone legislation to protect Aboriginal cultural heritage, which will be a significant reform for NSW. The first stage of this work has been completed and includes significant changes in relation to this commission.

Changes to the *National Parks and Wildlife Act 1974 (as amended)* legislation made effective on 1 October 2010 include:

- increased penalties for Aboriginal heritage offences, in some cases from \$22,000 to up to \$1.1 million in the case of companies who do not comply with the legislation;
- ensuring companies or individuals cannot claim 'no knowledge' in cases of serious harm to Aboriginal heritage places and objects by creating new strict liability offences under the Act;
- introducing remediation provisions to ensure people who illegally harm significant Aboriginal cultural heritage sites are forced to repair the damage, without need for a court order; and
- unification of Aboriginal heritage permits into a single, more flexible permit and strengthened offences around breaches of Aboriginal heritage permit conditions.

1.3.2 Heritage Act 1977

Historical archaeological relics, buildings, structures, archaeological deposits and features are protected under the *Heritage Act 1977 (as amended 1999)* and may be identified on the State Heritage Register or by an active Interim Heritage Order, in which they are protected under the *Heritage Act 1977* and may require approvals or excavation permits from the NSW Heritage Division.

1.3.3 The Burra Charter

The Burra Charter is a set of best practice principles and procedures for heritage conservation. It was developed by Australia ICOMOS (International Council on Monuments and Sites), the Australian group of the international professional organisation for conservation. Although not cited formally in any Act, the Burra Charter underpins heritage management in NSW and Australia. The policies and guidelines of the Heritage Council of NSW and the NSW Heritage Division are consistent with and guided by the Burra Charter.

1.3.4 Environmental Planning & Assessment Act 1979

The EP&A Act regulates the system of environmental planning and assessment for NSW. Land use planning requires that environmental impacts are considered, including the impact on cultural heritage and specifically Aboriginal heritage. Assessment documents prepared to meet the requirements of the EP&A Act should address Aboriginal heritage, as well as relevant requirements of planning documents such as Local Environmental Plans (LEP).

1.3.5 Aboriginal Land Rights Act 1983

The purpose of this legislation is to provide land rights for Aboriginal people within NSW and to establish Local Aboriginal Land Councils. The land able to be claimed by Aboriginal Land Councils on behalf of Aboriginal people is certain Crown Land that (clause 36 of the *Aboriginal Land Rights Act 1983*):

- (a) *are able to be lawfully sold or leased, or are reserved or dedicated for any purpose, under the Crown Lands Consolidation Act 1913 or the Western Lands Act 1901,*
- (b) *are not lawfully used or occupied,*
- (b1) *do not comprise lands which, in the opinion of a Crown Lands Minister, are needed or are likely to be needed as residential lands,*
- (c) *are not needed, nor likely to be needed, for an essential public purpose, and*
- (d) *do not comprise lands that are the subject of an application for a determination of native title (other than a non-claimant application that is an unopposed application) that has been registered in accordance with the Commonwealth Native Title Act, and*
- (e) *do not comprise lands that are the subject of an approved determination of native title (within the meaning of the Commonwealth Native Title Act) (other than an approved determination that no native title exists in the lands).*

Claims for land are submitted by application to the Office of the Registrar, *Aboriginal Land Rights Act 1983*.

1.3.6 Native Title Act 1993

The Commonwealth Government enacted the *Native Title Act 1993* to formally recognise and protect native title rights in Australia, following the decision of the High Court of Australia in *Mabo & Ors v Queensland* (No. 2) (1992) 175 CLR 1 (“Mabo”).

Although there is a presumption of native title in any area where an Aboriginal community or group can establish a traditional or customary connection with that area, there are a number of ways that native title is taken to have been extinguished. For example, land that was designated as having freehold title prior to 1 January 1994 extinguishes native title, as does any commercial, agricultural, pastoral or residential lease. Land that has been utilised for the construction or establishment of public works also extinguishes any native title rights and interests for as long as they are used for that purpose. Other land tenure, such as mining leases, may be subject to native title, depending on when the lease was granted.

1.4 Authorship and Acknowledgements

This CHIA was prepared by Gillian Goode, RPS Senior Cultural Heritage Consultant with assistance from Laraine Nelson, Philippa Sokol and Jeremy Hill of RPS, and reviewed by Tessa Boer-Mah, RPS Newcastle Cultural Heritage Manager.

The study team acknowledges the assistance in preparing this CHIA of various organisations and individuals, including the Registered Aboriginal Parties (RAPs) participating in the Wambo works.

2.0 Aboriginal Consultation

The purpose of Aboriginal community consultation is to provide an opportunity for the relevant RAPs to have input into the cultural heritage management process. The OEH encourages consultation with Aboriginal people for matters relating to Aboriginal heritage. If an Aboriginal Heritage Impact Permit (AHIP) is required, then the ACHCRs are triggered in relation to Aboriginal consultation. In some circumstances the ACHCRs are also used as a framework for Aboriginal consultation, even if not specifically triggered by the preparation of an AHIP application.

As described in Section 1.2, WCPL is applying for modification to Development Consent (DA 305-7-2003) under Section 75W of the EP&A Act. As such, Aboriginal consultation is required to be undertaken in accordance with the ACHCRs.

The ACHCRs include a four stage Aboriginal consultation process which stipulates specific timeframes for the components of each consultation stage. Stage 1 requires that Aboriginal people who hold cultural information are identified, notified and invited to register an expression of interest (EoI) in the assessment. This identification process should draw on reasonable sources of information including: the Registrar (*Aboriginal Land Rights Act, 1983*), the relevant OEH Environment Protection Regulation Group Regional Office, the relevant Local Aboriginal Land Council(s), the National Native Title Tribunal, Native Title Services Corporation Limited, the relevant Catchment Management Authority and the relevant local council(s). The identification process should also include an advertisement placed in a local newspaper circulating in the general location of the project area. Once a list of RAPs has been compiled from the EoI process, the RAPs need to be consulted in accordance with stages 2, 3 and 4 of the ACHCRs.

Stages 2 and 3 of the ACHCR consultation process require the preparation of information about the Modification and the gathering of information about cultural significance. These stages include the provision of a Proposed Methodology to the RAPs for their review and comment, and the subsequent consideration of any comments received in the finalisation of the methodology. Stage 4 of the ACHCR consultation process requires that the assessment report (i.e. this CHIA) be provided to the RAPs for review and comment.

2.1 Registered Aboriginal Groups

Aboriginal stakeholder groups with an interest in Aboriginal heritage works at Wambo have previously been identified (in compliance with the ACHCRs) and WCPL has maintained ongoing consultation and engagement with these groups since their individual expressions of interest. These Aboriginal stakeholder groups include those parties who registered for the following assessments:

- The South Wambo Underground Mine Modification registration period in September/October 2012.
- The North Wambo Underground Mine Modification registration period in May/June 2011.

A list of the RAPs for the Modification is provided in **Table 1**.

Table 1 Registered Aboriginal Parties

Organisation	Name of Representative
Aboriginal Native Title Consultants	John & Margaret Matthews
AGA Services	Patricia Kennedy
Bawurra Consultants	Kevin Sampson
Breeza Plains Cultural Heritage Consultants	Terry Matthews
Bullem Bullem Heritage Consultants	Lloyd Matthews
Buudang (previously Muronga Gialinga)	Larry and Debbie Foley
Carcatchua Pty Ltd (previously Cacatua Culture Consultants)	Donna & George Sampson
Carrawonga Consultants	Justin Matthews
Culturally Aware	Tracey Skene
Deslee Talbott Consultants	Deslee Matthews
DFTV	Derrick Vale Senior
DRM Cultural Management	Helen Faulkner
EMT Cultural & Heritage	Mervyn Lesley
Galamaay Consultant	Karen Matthews
Gidawaa Walang Cultural Heritage Consultancy	Annie Hickey
Giwiirr Consultants	Michele Stair
HECMO Consultant	Kerren Boyd
Heilamon Cultural Consultants	Clifford Johnson
HTO Environmental Management Services	Paulette Ryan
Hunter Valley Aboriginal Corporation	Nicole Smith
Hunter Valley Cultural Consultants	Christine Archbold
Hunter Valley Cultural Surveying	Luke Hickey
Hunter Valley Natural & Cultural Resource Management	David French
I & E Aboriginal Culture and Heritage	Ivy Jaeger
Janbant Mugrebea	Les Atkinson
JLC Cultural Services*	Jenny Chambers
Kauwul Pty Ltd (Wonn1)	Arthur Fletcher
Kawul Cultural Services	Vicky Slater
Kayaway Eco-Cultural and Heritage Services	Mark Hickey
KL.KG Saunders Trading Services	Krystal Saunders
L.J. Cultural Management	Les Field
Lower Hunter Aboriginal Incorporated	David Ahoy
Lower Hunter Wonnarua Cultural Services (also known as Lower Hunter Wonnarua Council Inc)	Tom Miller
Maree /TA Wallangan Cultural Services	Maree Waugh
Mingga Consultants	Clifford Matthews
Moreeites	Susan Cutmore
Muswellbrook Cultural Consultants	Brian Horton
Myland Cultural Heritage Group	Warren Schillings
Ngarramang-Kuri Aboriginal Culture & Heritage Group	Abie Wright
Smith Dhagaans Cultural Group	Timothy Smith

Organisation	Name of Representative
T & G Culture Consultants	Tony Griffiths
Ungooroo Aboriginal Corporation	Tasha Layer
Ungooroo Cultural & Community Services	Rhonda Ward
Upper Hunter Heritage Consultants	Darryl and Melissa Matthews
Upper Hunter Wonnarua Council Inc	Victor Perry
Valley Culture	Larry Van Vliet
Waabi Gabinya Cultural Consultancy	Elizabeth Howard
Wanaruah Custodians Aboriginal Corporation	Reginald Eveleigh
Wanaruah Local Aboriginal Land Council	Suzie Worth
Warragil Cultural Services	Aaron Slater
Wattaka Wonnarua Cultural Consultancy Services	Des Hickey
Widescope Indigenous Group Pty Ltd	Amanda Hickey
Wonnarua Culture Heritage	Joseph Griffiths
Wonnarua Nation Aboriginal Corporation	Laurie Perry
Wonnarua Traditional Owners	Des Hickey
Wurrumay Consultants	Kerrie Slater
Yarrawalk division of Tocomwall Pty Ltd	Scott Franks
Yinaar Cultural Services	Kathleen Steward-Kinchela
-	Ronald Fenwick
-	Jill Green
-	Jeffery Matthews
-	Roger Noel Matthews
-	Roslyn Sampson
-	Scott Smith
-	Lorraine Towney

* JLC Cultural Services contacted WCPL in June 2014 to express an interest in being involved in the management of Aboriginal heritage at Wambo. WCPL advised JLC Cultural Services that they could be involved as an Interested Stakeholder and were added to the Wambo fieldwork roster accordingly.

2.2 Proposed Methodology and Strategy for Collecting Information on Cultural Heritage Significance

Information regarding the Modification, an invitation to an information session and a copy of the Proposed Methodology was provided in writing on 22 May 2014 to all RAPs listed in **Table 1**.

All RAPs were invited to an Information Session held at Wambo on Wednesday 11 June 2014. At the information session, WCPL provided a presentation on the nature and scale of the proposed Modification, an overview of the impact assessment process, a discussion of the roles, functions and responsibilities of participants and protocols for the management of any sensitive cultural heritage information. The information session also provided RAPs with an additional opportunity to raise any cultural issues or comments/perspectives regarding the proposed Modification or the Proposed Methodology.

Only one RAP (Ronald Fenwick) attended the Information Session on 11 June 2014, despite multiple RSVPs from several of the RAPs invited.

Subsequent to the meeting, a copy of the information presented at the Information Session was sent to all RAPs (i.e. all of the RAPs listed in **Table 1**) on 18 June 2014 by mail and on 19 June 2014 by email to those RAPs who requested that contact only be made through the email address provided (i.e. Kawul Cultural Services and Wurrumay Consultants).

2.3 Field Survey Thursday 5 and Friday 6 June 2014

The field surveys were undertaken during the period for review and comment on the Proposed Methodology. It was explained at the Information Session (11 June 2014) (and described in the material provided to all RAPs following the Information Session) that if any RAP had comments on the Proposed (assessment) Methodology which (subject to agreement by WCPL) would change the approach for the field surveys (i.e. pedestrian survey across the study area), WCPL would commit to re-surveying the relevant portions of the study area following the Proposed Methodology review period. As no comments of this nature were received, no additional survey work was undertaken.

Participation by the RAPs in field surveys for the Modification occurred in accordance with the roster system established at Wambo on 12 February 2009. This roster system provides for the equitable distribution of fieldwork for the various RAPs at Wambo. In accordance with the roster system, the 12 RAPs invited to attend the field surveys for the Modification included: Culturally Aware, Yarrawalk (a division of Tocomwall Pty Ltd), Wattaka Wonnarua Cultural Consultancy Services, Lower Hunter Wonnarua Council Inc, Valley Culture, Aboriginal Native Title Consultants, Bullem Bullem Heritage Consultants, Wonnarua Culture Heritage, Ungooroo Cultural and Community Services, Hunter Valley Cultural Surveying, HTO Environmental Management Services and Kayaway Eco Cultural & Heritage Services.

RPS sent out invitations to these 12 RAPs by mail, email, fax and telephone on a number of occasions. Valley Culture could not be reached. Where attempts to contact the rostered RAPs were unsuccessful, or where the rostered RAPs were unable to satisfy Wambo site requirements, then attempts were made by mail, email, fax and telephone to the next RAPs on the roster. Accordingly, Wonnarua Nation Aboriginal Corporation, Maree T/A Wallangan Cultural Services, KL.KG Saunders Trading Services, Kawul Cultural Services, Waabi Gabinya Cultural Consultancy, Moreeites and Ungooroo Aboriginal Corporation and Carcatchua Pty Ltd (previously known as Cacatua Culture Consultants) were contacted with an invitation to attend the field surveys for the Modification.

The Sites Officers from the rostered RAPs who participated in the field survey for the Modification on 5 and 6 June 2014 are listed in **Table 2** below. As part of the Proposed Methodology, copies of OEH site cards relevant to the Modification Project area were provided onsite during the course of the survey works.

Table 2 Registered Aboriginal Parties who Participated in the Field Survey on 5 and 6 June 2014

Organisation	Name of Representative	Date Attended
Culturally Aware	Tracey Skene	5/6/2014
Lower Hunter Wonnarua Cultural Services (also known as Lower Hunter Wonnarua Council Inc)	Tod Maley	5/6/2014
Maree /TA Wallangan Cultural Services	Maree Waugh	5/6/2014
Wattaka Wonnarua Cultural Consultancy Services	Colin Sheppard*	5/6/2014
Wattaka Wonnarua Cultural Consultancy Services	Luke Hickey*	5/6/2014
Wonnarua Culture Heritage	Joshua Griffiths	5/6/2014
Carcatchua Pty Ltd previously registered as Cacatua Culture Consultants	Donna & George Sampson	6/6/2014
Ungooroo Aboriginal Corporation	Allen Paget	6/6/2014
Ungooroo Cultural & Community Services	Maree Waugh	6/6/2014
Wonnarua Nation Aboriginal Corporation	Rebecca Lester	6/6/2014

* HTO Environmental Management Services & Hunter Valley Cultural Surveying were unable to satisfy Wambo site requirements, and their representative therefore represented Wattaka Wonnarua Cultural Consultancy Services for onsite works, and an adjustment to the roster will be made to reflect this.

At the end of the field survey a review of the area surveyed was made with the participating RAPs. The RAPs were asked to comment on the cultural significance of the area surveyed, the survey methodology undertaken and any additional comments they might have. The RAPs stated that they were generally happy with the survey coverage which was covered by measured transects. It was explained to the RAPs that all new sites identified during the field survey would be registered on the AHIMS database and would be incorporated in the field survey results mapping presented in this CHIA.

Field maps and previously recorded sites within and in close proximity to the Modification Project Area were discussed, particularly in relation to their site patterning and proximity to resources such as water and food. The RAPs stated that they considered the banks of permanently flowing streams to be archaeologically sensitive. Discussion took place during the field surveys relating to the occurrence of the Aboriginal cultural heritage sites on the elevated landforms to the south of Wambo Creek and Stony Creek, and on the bank of Wollombi Brook to the east of the Modification Project Area. Conversely the site patterning differed with a paucity of sites in the undulating plain that covered the majority of the Modification Project Area. It was discussed that the lack of Aboriginal cultural heritage sites within the undulating plain was likely due to repeated inundation events and modifications to the land surface in floodplain area. The RAPs stated that they view all sites as culturally significant and that there is a complex and rich archaeological resource at Wambo, as evidenced by the known Aboriginal sites in the area.

The RAPs present at the field survey stated that they should be included in all stages of the management of the sites in the Modification Project Area. The existing Consent 2222, that is a s87 and s90 consent to carry out the destruction of an Aboriginal object/place and permit to collect and excavate for the purpose of salvage) covers the vast majority of the Modification Project Area. It is therefore proposed by WCPL that the existing Consent 2222 be varied if required, to cover the southern extent and the north eastern tip of the Modification Project Area, in order to allow for subsidence and the salvage (if required) of registered and unregistered sites (should they be uncovered) in the Modification Project Area.

The RAPs suggested that subsidence monitoring should be regularly conducted by Wambo to ensure subsidence movements are consistent with the predicted movements. It was also noted that wherever possible impacts to Aboriginal cultural heritage sites should be avoided; Aboriginal cultural heritage sites should be cordoned off to protect them from inadvertent potential impact by vehicles and to restrict access by WCPL personnel; and that infrastructure should only be located within the limit of approved disturbance areas. It was discussed with the RAPs that artefacts should only be salvaged under an AHIP if harm to the objects cannot be prevented.

A summary of the issues raised by the RAPs during the field survey, and how they have been addressed is provided in **Table 3**.

Table 3 Summary of the issues raised by Sites Officers during field survey and how they have been addressed in the CHIA

Issue	Response
Likelihood that sites within the Modification Project Area will be harmed by the Modification.	As described in Section 8 impacts to archaeological and cultural heritage within the Modification Project Area is predicted to be moderate to low.
Cultural sensitivity of the areas – the RAPs stated that all sites are culturally significant and that there is a complex and rich archaeological resource in the area particularly along the creek banks.	During the survey there was a request from a RAP representative to register an area of potential archaeological deposit (PAD) 20 m north of Wambo Creek. It was explained that due to the low elevation of this area and its proximity to Wambo Creek, the landform would have regularly been inundated, and therefore was unlikely to contain <i>in-situ</i> archaeological material. It thus does not meet the archaeological criteria for a PAD. Notwithstanding, the comment from the RAPs has been recorded.
Archaeological sensitivity in the floodplain of the Modification Project Area.	Due to the level of erosion, effects of inundation and disturbances from previous farming practices, no areas of archaeological sensitivity were identified in the floodplain.
The RAPs wished to be involved in all stages of the management of the sites in the area.	Known Aboriginal cultural heritage sites within the Modification Project Area are currently managed in accordance with the Section 87/90 Permit Consent 2222. Prior to mining, an Extraction Plan would be developed for Longwall 10A. The Extraction Plan would include a Heritage Management Plan which would detail proposed management measures for Aboriginal cultural heritage sites within the Modification Project Area.
The RAPs requested that regular subsidence monitoring be undertaken.	WCPL regularly conducts subsidence monitoring and will develop a subsidence monitoring plan for the Modification Project Area.

WCPL has confirmed that no additional surface disturbance works are proposed for the Modification, other than remediation works (if required). Vehicular movements within the proposed Modification Project Area would be limited to those required for monitoring and general maintenance activities. Vehicle access would be via existing vehicle tracks.

A variation to the existing Consent 2222 may be required to allow works to be undertaken to address minor additional disturbances to the Modification Project Area (i.e. potential subsidence impacts). This CHIA report will support the AHIP application.

2.4 Cultural Significance

With regards to gathering information about cultural significance in relation to the Modification Project Area, this CHIA presents relevant comments from the RAPs recorded during the June 2014 fieldwork. It is noted that the views documented below are based on feedback received from representatives of the RAPs and may not reflect the views of the Aboriginal community as a whole.

2.5 Native Title Searches

A search of the National Native Title Tribunal register information was made for the Wambo Mining Tenements on 29 May 2014. A reminder of the search request was sent to the National Native Title Tribunal on 19 June 2014 and a reply was received on 20 June 2014. The results of the search show that a Native Title Determination Application has been lodged by the Plains Clans of the Wonnarua Nation over an area that includes Wambo. The Application is at the pre-notification stage. A copy of the Native Title Determination Application is shown in **Appendix 3**.

2.6 Comments on the Proposed Methodology

The period of review and comment on the Proposed Methodology closed on 23 June 2014, in accordance with the ACHCR process which provides a minimum of 28 days for comment by the RAPs.

At the close of the Proposed Methodology review period no comments or feedback on the Proposed Methodology had been received by RPS or the proponent. As described in Section 2.2, an Information Session was held at Wambo on 11 June 2014 which provided all RAPs with an additional opportunity to raise any cultural issues or comments/perspectives regarding the proposed Modification or the Proposed Methodology. A copy of the material presented at the Information Session was sent to all RAPs on the 18 June 2014 by mail and 19 June 2014 by email.

2.7 Comments on the Draft CHIA Report

In accordance with the ACHCRs, the draft of this CHIA was provided to all RAPs listed in **Table 1** (copies sent 4 July 2014) for review and comment. Comments on the draft CHIA were requested (either verbally or in writing) by 5 August 2014. Responses received are included in the Consultation Log in **Appendix 1** (if verbal) or in **Appendix 2** (if written/email) of this report. This report will support the AHIP variation application.

The following responses were received from the RAPs on 29 July 2014:

- Aboriginal Native Title Consultants – provided verbal response and advised that they were unable to provide comments on the draft CHIA.
- Bawurra Consultants – provided verbal response and advised that they did not have any comments.
- Carcatchua Pty Ltd – provided verbal response that they were happy with the draft CHIA.
- AGA Services – provided verbal response via Carcatchua Pty Ltd that they were happy with the draft CHIA.
- EMT Cultural and Heritage – provided verbal response that they were happy with the draft CHIA.
- Gidawaa Walang Cultural Heritage Consultancy – provided verbal response that they were happy with the draft CHIA.
- Giwiir Consultants – provided verbal response that they were happy with the draft CHIA.
- HECMO Consultants – provided verbal response that they were happy with the draft CHIA.

- Hunter Valley Aboriginal Corporation – provided verbal response that they were generally in support of the draft CHIA and that they would support any comments made by the Wanaruah Local Aboriginal Land Council.
- Hunter Valley Consultant – provided verbal response that they were happy with the draft CHIA.
- T/A Wallangan Cultural Services– provided verbal response that they were happy with the draft CHIA.
- Jeffrey Matthews – provided verbal response that he was happy with the draft CHIA.
- Lorraine Towney – provided verbal response that she was happy with the draft CHIA.
- Scott Smith – provided verbal response that he was happy with the draft CHIA.
- Wattaka Wonnarua Cultural Consultancy Services – provided verbal response that they were happy with the draft CHIA.

The above comments provided by the RAPs have been acknowledged and noted by WCPL.

Comments Received from Yarrawalk (a Division of Tocomwall Pty Ltd)

On 1 August 2014, Yarrawalk (a Division of Tocomwall Pty Ltd) provided the following comments (via email) on the draft CHIA.

Comment:

“Tocomwall and PCWP do not support or will it comment on a draft report that has not followed the CCGL for proponents. We have made it quite clear that Wombo have not complied, Tocomwall was contacted to conduct a field survey well before the comment period expired for the Methodology. Tocomwall request that OEH investigate Wombo mine for possible non compliance of the current consultation guidelines. We are more than happy to make available all and any correspondence with regard to this issue to OEH and Dopi.”

WCPL Response:

As described in Section 2.2 a copy of the Proposed Methodology was provided to all RAPs on 22 May 2014 with comments requested by 23 June 2014. The field surveys for the Modification were undertaken on 5 and 6 June 2014 during the review period for the Proposed Methodology. The following commitment was made by WCPL to all RAPs during the information session and also provided to all RAPs in a hard copy presentation following the information session (11 June 2014):

If any submissions or comments are received in regard to the Proposed Methodology that WCPL reasonably considers would have altered the field survey design/implementation, then WCPL commits to consider those submissions and take reasonable steps to address them, having regard to the survey requirements and the objectives of the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010).

Further to this, separate correspondence was provided directly to Mr Scott Franks on 6 June 2014 regarding the timing of the survey work which specifically stated that if Yarrawalk (a Division of Tocomwall Pty Ltd) or any other RAP had comments which WCPL reasonably considered would change the current approach for the field surveys (i.e. pedestrian survey across the extent of the Study Area that has not been subject to previous systematic survey), WCPL committed to re-surveying the Study Area following the Proposed Methodology review period. A copy of this correspondence has been attached for your reference and is included in **Appendix 2**.

WCPL considers that the consultation process undertaken to date for the CHIA associated with the Modification (including the provision of a Proposed Methodology, approach to survey work and timing of survey work) is in compliance with the requirements of the NSW *National Parks and Wildlife Regulation, 2009* and the OEH policy *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010a).

Comments Received from Ronald Fenwick

On 19 August 2014, Ronald Fenwick provided the following comments (letter via email) on the draft CHIA.

Comment:

"The history of the native population of the Singleton Shire is general correct only to the limits of the white settler's records and is not fully true to available knowledge of the "local" tribes, clans. It does not include proper accounts from local travellers from bordering lands that travelled to and through the area.

It is easy for people to find the records made by the European settlers and through reading these assimilate provenances to support claims to knowledge. The history of the people was kept in the oral history of the clans and was reliable and permanent particularly as they were narrated in the stories of the animals and birds and how the lands were formed and the sacred places were the "books" of the people and did not need to be written as in the books of the white man as these could change for different agendas. The narratives as written in the dreaming place cannot change and remain true by being told by the people.

Written history was not needed in the minds of the elders who saw writing by the whites as taking from them. The status within the clan forbade breaching the traditional passing of the stories.

Understanding of the mindset of the local people was not attempted. The local natives retaliated and defended on honour grounds rather than attacked. Settlers created conflict by not recognising that the land had an ownership and the people belonged to the land before settlement by the British.

Locally there were two predominant clans or tribes that were regular people living within the Hunter Valley, the Daaginyaang traditionally residing within the southern side of the Hunter Valley in the Singleton, Bulga and Broke districts and the Wanaaru-waa residing within the northern side of the Hunter Valley downstream from Singleton. There are records of regular travellers from outside the areas with Dubbo, Bathurst, Mudgee clans and others allied to the Wiradjuri people.

The people were not innocents who failed to realise the white men were selecting their lands for occupation. They learnt of the treachery of the settler through deeds and stories. Unfortunately the clans thought in localised terms, directing their resentment against specific individual settlers and convicts who acted against them. It must be noted that these clans were in feud with others and these retaliations were held over generations as the stories told. This state of suspicion was extended to individual "groups" of whites.

Records show the people uniting in times of threat by the settlers, grievances were personal, in accordance with lore. The people knew those who they were in conflict with and rarely killed strangers.

Locally there were some 15 or so families or clans that moved about the local lands with only minor travels outside. The Wharmboolar, Whollumbi, Wiradjuri, Darkinung, Wonarua, Bulghara were some of these. There are several sites within the area partially recorded, and then only to a minor degree. Many more are only known to some through the traditional means of story through family. Many of these can be found with care as it was determined that the provision of knowledge was to be held by the lores. The dispossession of the cultures is a direct result of European settlement. Ceremonies have been discouraged to the point that in reference to the ceremonial meeting site referred to as the Bulgar Bora ground has not been used for ceremony since about 1927.

The most significant records now available are held through the women who had no access to the Bora sites and their stories are family based. There are still many descendants within the wider area and some snippets of history are still being passed on.

The status within the clan forbade breaching the traditional passing of the stories outside the strict laws of how and when and by whom certain kinds of knowledge may and may not be passed on.

The interpreting of these stories has been generalised and breaks truth. A number of books have been published that contain secret and sacred knowledge that should never have been passed into the public sphere. This included the reproduction of sacred paintings. Elders realised that this knowledge was not to be “for the books of the whites” and only allowed general information to be passed on with hints of the meanings of the stories and paintings and no specific releases of site locations. The whites proved they could not be trusted. In the process of the stories, and telling of the paintings and markings, the narrator presented what he considered necessary and would be adjusted to the knowledge rights of each audience.”

WCPL Response:

WCPL acknowledges these comments.

Comment:

“The reference to the Bulgar Bora Ground is an example. To have this site referred to as a specific grid reference according to the records of the National Park and Wildlife Service begs wonder. Who got the exact location and when was it recorded? The last time the site was seen and recorded by whites (not known as aboriginal) was in 1927. Knowledge of the cultures and scarred sites and ceremonies was not passed on outside the strict laws on the clans.”

WCPL Response:

As described in Section 4.4, a bora ground (AHIMS #37-5-0056) (Wambo Site 2) has been recorded in the region, but this site is more than 2 km to the east of the Modification Project Area. The bora ground is located on the eastern bank of Wollombi Brook to the south-east of the Modification Project Area. The bora ground will not be impacted by the Modification, and therefore is not considered further in this CHIA.

Comment:

“Another part of culture that is misdirected is the reference to the Kadaicha or Kadicha. Most history of the magic is not completely explained outside the clans. The beliefs and practices of these Spiritual Tribal Advisors, Kadaicha Men, were passed on through ceremony. Bone pointing and the determined pursuits for tribal justice are common stories that come to mind with fear the purpose. The Kadaicha travelled leaving no tracks this helped to conjure the idea of his power.

Within the area to be “assessed” for Wambo there are many sites that could be recorded. To present time there is no need to visit sites for whatever reason and the areas are restricted by modern ownership and laws of the land. Similarly there is no genuine reason today as there was in the early years of settlement to show to the settlers the Boras, the burial sites, the paintings and the ceremonies. To those who know of the sites there is still the suspicion towards others that preserve the cultural nature of them. Within the immediate area there are:

Boras- *these are scattered and many have been removed or disturbed through the settlement and farming practices.*

Middens- *are found throughout the areas where camps were used, where food was located and where ceremonies required people to be. They can also be found in the rock shelters and contained fragments of bone, animal as well as those from burials and tool components.*

Burials- *sites are found with single and multiple usage reflected by the clans to respect the different levels of the deceased.*

Camps and shelters- *many are now dispersed or over-covered by clearing, working of the land and the now frequent bushfires.*

Culling and massacre sites *within the area. There are several of these that have been missed or overlooked*

within the area that ranges from Bulga to Warkworth and close regions.

Rock Shelters- *are largely intact with only animal usage today. Those in this area have had no “tourist” attention and generally only small shelters or are too difficult to reach.*

Stone placements- *are not prominent or all have been moved for one reason or another.*

Cooking and working fire sites- *these are found near shelter sites. They were close to special trees for making hunting tools-spear, axe, boomerang as well as for ceremonial instruments. Fire was needed to work the wooden tools-to straighten, point and harden.*

Paintings- *can still be found*

Scar trees- *bark removed for many purposes like multipurpose shields that were used also for carrying foods and fire when moving camp and for shelter*

Carved trees- *to record history of sites of gatherings or special events that took place as well as to indicate boundaries and taboos.*

Special trees- *that served purposes such as medicinal and shelter as well as spear and didge forming.*

Sharpening Stones- *are still present and are often overlooked.*

Axe and Spear Grinding Grooved rocks- *usually special rocks and some had been relocated near camps.*

I would point out that there is a need to respect the land and the history during the assessment process and would advise that assurance be given prior and during the assessment fact searching.”

WCPL Response:

WCPL acknowledges these comments. Section 4 provides a summary of historic records of Aboriginal occupation, regional and local archaeological heritage context, results of an AHIMS search, a predicted model for archaeology in the Modification Project Area and site predictions. Section 6.4 describes the survey results, including any previously recorded sites not necessarily re-identified during the Modification surveys.

Comment:

“The registered aboriginal parties and existing Wambo roster system breaks cultural lore with the traditional “locals” not being considered and potentially not involved in the inspections.

Apart from failing to respect the local people and lands this challenges the authenticity of the claimed findings or lack of findings.

This roster system as set up for Wambo Coal divests the inspections of the cultural links with the lands. There have been many inspections carried out without local people involved and there have been many area traditional breaches in accordance with this policy. Clans that for generations have no welcome in the area have undoubtedly been involved and this is obvious from the aspect that under the roster system the local people may never be notified, respected or involved.”

WCPL Response:

Aboriginal stakeholder groups with an interest in Aboriginal heritage works at Wambo have previously been identified (in compliance with the ACHCRs) and WCPL has maintained ongoing consultation and engagement with these groups since their individual expressions of interest (Section 2.1).

As described in Section 2.3, participation by the RAPs in field surveys for the Modification (and other works at the Wambo Coal Mine) occurred in accordance with the roster system established at Wambo on 12 February 2009. This roster system provides for the equitable distribution of fieldwork for the various RAPs at Wambo. All RAPs involved in the Modification are included on the Wambo Coal Mine fieldwork roster.

Comment:

"During the time of the Wambo Coal Mine there has only been one investigation taken within the area of Wambo Creek that has been carried out with full respect and consideration for the culture and country. That was the survey that was conducted for the Application for DA 108/91 and was recorded by Tessa Corkill and is noted as 1990.

There are other past surveys claimed that to my knowledge did not occur, or did not occur as the authors claim, or did not obtain the appropriate permissions as required by the laws of the land as well as the lore of the land.

Some of the more recent assessments rely on past information that has not been fully explored and certified by the people claiming to have knowledge, let alone local knowledge.

There is and will most likely never be proper listing for the peoples and the sites in the lands that were travelled to by the "local" clans, and particularly no listings of the Bora or Ceremonial areas within the district.

The search for special foods and the allied associations with other clans were intertwined. Understanding of the animal and bird migrations let them know when and where to go for the plants, fruits where birds and animals were plentiful. Camps were used and reused by clans."

I have not provided any information that will compromise the sites within the area to assess."

WCPL Response:

WCPL acknowledges these comments. As described in Section 1.2, this CHIA has been undertaken in accordance with the ACHCRs (DECCW, 2010a), the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b), the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011) and the Burra Charter (ICOMOS 2013).

Comment:

"I was not notified as to who attend and their family/clan/ tribal link to the lands and it goes without saying that according to the intent of the assessment I should have been appropriately notified."

WCPL Response:

As described in Section 2.3, participation by the RAPs in field surveys for the Modification occurred in accordance with the roster system established at Wambo on 12 February 2009. **Table 2** provides a list of the RAPs who participated in the field survey for the Modification on 5 and 6 June 2014.

Comment:

"To date I have heard nothing of the assessment through any of the seven major clans that have connection with the immediate region let alone having input from these. As stated previously I would expect to be involved with all inspections within the immediate area."

WCPL Response:

Aboriginal stakeholder groups with an interest in Aboriginal heritage works at Wambo have previously been identified (in compliance with the ACHCRs) and WCPL has maintained ongoing consultation and engagement with these groups since their individual expressions of interest (Section 2.1).

Regardless of participation in the field surveys, all RAPs have been consulted with throughout the preparation of the assessment including the opportunity to review and provide comment on the Proposed Methodology and the draft CHIA, as well as the opportunity to provide comments and feedback at any point during the preparation of the assessment and at the information session.

As described in Section 1.2, this CHIA has been undertaken in accordance with the ACHCRs (DECCW, 2010a), the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b), the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (OEH 2011) and the Burra Charter (ICOMOS 2013).

A full consultation log has been provided in **Appendix 1** of this CHIA. Copies of all relevant correspondence received in relation to this CHIA are included in **Appendix 2**, along with correspondence provided to the RAPs during the consultation process.

3.0 Environmental Context

An understanding of environmental context is important for the predictive modelling of Aboriginal sites, as well as for their interpretation. The local environment provided natural resources for Aboriginal people, such as stone (for manufacturing stone tools), food and medicines, wood and bark (for implements such as shields, spears, canoes, bowls, shelters, amongst others), in addition to areas for camping and other activities. The nature of Aboriginal occupation and resource procurement is related to the local environment and it therefore needs to be considered as part of the cultural heritage assessment process. The reporting of environmental context is required under the *Code of Practice of Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b).

3.1 Geology

Aboriginal people often made stone tools using siliceous, metamorphic or igneous rocks and therefore understanding the local geology can provide important information regarding resources in the Modification Project Area. The nature of stone exploitation by Aboriginal people depends on the characteristics of the source, for example whether it outcrops on the surface (a primary source), or whether it occurs as gravels (a secondary source) (Doelman et al. 2008).

Most of the Modification Project Area is characterised by the Late Permian Singleton Supergroup which is part of the Permian Singleton Coal Measures (sandstone, shale, mudstone, conglomerate and coal seams) (Department of Mines 1969). The surface geology of the Modification Project Area is predominantly the Wollombi Coal Measures in the south-west and Denman Formation of the Wittingham Coal Measures in the north. Quaternary alluvial silt and sand deposits dominate most of the Modification Project Area, along the flats of Wollombi Brook. The Wollombi Coal Measures comprise coal seams in association with carbonaceous shale, siltstone, sandstone and tuffaceous claystone (Department of Mines 1969). The Denman Formation of the Wittingham Coal Measures also consists of coal seams and claystone, tuff, siltstone, sandstone, conglomerate and sandstone siltstone laminate (Sniffin, McIlveen and Crouch 1988).

Generally, the late Permian Wollombi Coal Measures overlie the Wittingham Coal Measures, which in turn overlie the mid to early Permian Maitland Group. The Maitland Group in turn overlies the early Permian Greta Coal Measures which are underlain by the Dalwood Group. These strata layers form the Singleton Super Group. There is evidence of volcanic activity in the area including felsic volcanics, fault lines and a number of dykes (Sniffin, McIlveen and Crouch 1988).

The presence of sandstone in the Modification Project Area is important for Aboriginal occupation as sandstone was commonly used for grinding stone artefacts. Rock engravings and grinding grooves may be found in areas of exposed sandstone and sandstone outcrops, particularly along creek beds in nearby creek lines such as Wollombi Brook or North Wambo Creek. Raw materials in the local area including silcrete, indurated mudstone and silicified tuff, as well as chert, basalt, rhyolite and petrified wood were commonly used by Aboriginal people for manufacturing flaked stone tools. The softer shales and claystones are highly susceptible to water erosion processes and are generally unsuitable for the manufacture of stone tools. Overhangs and caves in sandstone cliffs and boulders below the cliff line were sometimes used for shelter and may be found in the sandstone escarpment to the south-west of the Modification Project Area.

3.2 Soils

The predominant soil landscape in the immediate Modification Project Area is consistent with the Bulga soil landscape, which consists of smooth slopes forming undulating rises. The Bulga soil landscape is characterised by sandstone colluviums, yellow and brown solodic soils and brown earths on the lower slopes, with yellow soloths on the mid slope and upper slopes. Minor to moderate sheet erosion is common (Kovac and Lawrie 1991:125-128). Aboriginal objects may be found in these gently sloping areas.

The soils in the north-east of the Modification Project Area, covering valley flats and levees of Wollombi Brook and tributaries are consistent with the Wollombi soil landscape. The Wollombi soil landscape is characterised by alluvial soils, mainly sands and earthy sands (Kovac and Lawrie 1991:425-427). Artefacts may occur associated with the banks of creeks in these areas dominated by alluvial deposits.

The Modification Project Area is characterised by duplex soils with clear to sharp horizon boundaries. The A horizon soils are generally moderately deep, approximately 120 mm up to 600 mm deep. The presence of potential stratified archaeological material is, therefore, possible. Where B Horizon soils are exposed, they are generally severely eroded and have been affected by water runoff and sheet wash erosion. A horizon soils can also be redeposited in the lower slope areas on a previously eroded B horizon (Kovac and Lawrie 1991:449). Artefacts may occur *in situ* within the moderately deep A horizon soils or redeposited atop the areas of exposed B Horizon.

3.3 Topography and Hydrology

The Modification Project Area has a generally south-west facing aspect and is situated to the west of Wollombi Brook, south of North Wambo Creek, with Stony Creek and Wambo Creek traversing the southern boundary. The Modification Project Area is predominantly consistent with the Bulga landscape, which is characterised by undulating rises formed by smooth slopes and covered by sandstone colluviums. Slopes are up to 10 percent (%) gradient and local relief is 20-40 m. Lengths of slopes are up to 200 m with drainage lines at 200-500 m intervals (Kovac and Lawrie 1991:125).

The Modification Project Area is situated within the Wollombi Brook water catchment, and is drained by a number of first and second order streams or creek lines.

The Modification Project Area lies approximately 500 m from North Wambo Creek, approximately 60 m from the upper bank of Wollombi Brook, and Stony Creek and Wambo Creek cut across the southern part of the Modification Project area. These are permanent water sources in this area although water availability on the upper slopes, mid slopes and foot slopes is dependent on the first and second order ephemeral tributaries of these larger waterways (Sniffin, McIlveen and Crouch 1988).

3.4 Climate

Approximately 18,000 years ago, climatic conditions began to alter which affected the movement and behaviour of past populations within their environs. During this time, notably at the start of the Holocene (more than 11,000 years ago), the melting of the ice sheets in the Northern Hemisphere and Antarctica caused the sea levels to rise, with a corresponding increase in rainfall and temperature. The change in climatic conditions reached its peak about 6,000 years ago (Short 2000-21). Up until 1,500 years ago, temperatures decreased slightly, stabilising about 1,000 years ago to temperatures similar to those currently experienced. Consequently, the climate in the locality of the study area for the past 1,000 years would be much the same as present day, providing a year round habitable environment.

The Modification Project Area is located in the Singleton LGA which is situated in the Hunter region of NSW. The Modification Project Area has a temperate climate that is affected by its proximity to the mountain ranges to the south-west. Summer and autumn are the wettest seasons with an average rainfall of approximately 720 mm and the temperatures averaging between 12 degrees and 24 degrees Celsius (Australian Bureau of Meteorology 2010). The temperate climate would be suitable for occupation for the majority of the year providing suitable shelter could be obtained during the wet periods.

3.5 Flora and Fauna

The historic settlement of the Hunter Valley included modification of the original vegetation communities, particularly through clearing for pastoral land uses. Broad scale vegetation mapping for NSW (Keith 2002) indicates that, prior to such modifications, the Modification Project Area was dominated by two vegetation communities, the Hunter-Macleay Dry Sclerophyll Forests and the Sydney Hinterland Dry Sclerophyll Forests.

The Hunter-Macleay Dry Sclerophyll Forests are characterised by an open canopy with trees up to 30 m tall, including spotted gums, iron barks, grey gums, boxes and turpentine. The understorey consists of a sparse layer of shrubs and a semi-continuous cover of grasses (Keith 2006:124). The Sydney Hinterland Dry Sclerophyll Forests occur throughout the Sydney sandstone basin below elevations of 600 m. The trees vary in size from 10 m tall on ridges and dry slopes, up to 25 m tall in gorges and sheltered slopes. The shrub understorey is more open and less diverse than that of the coastal dry sclerophyll forests (Keith 2006:148).

The large array of resource plant species available in the area indicates that the region could have also supported a rich variety of fauna species (National Parks and Wildlife Service NSW 2003) which Aboriginal people may have used for sustenance, tools, and clothing. In the past, these vegetation communities would likely have supported a range of fauna such as macropods, koalas, possums, gliders and a range of reptile and bird species. Evidence for the consumption of such faunal species has been recovered from Aboriginal archaeological excavations in the region (Attenbrow 2006:72-73).

It is considered that the area would have been well resourced in terms of water and food with a wide diversity of fauna and flora available in the local and regional area, although today the landscape has been highly disturbed by extensive clearing and previous farming practices.

3.6 Synthesis

A review of the environmental context of the region indicates that the probability of identifying Aboriginal cultural heritage sites in the Modification Project Area is considered to be high. The geology underlying the Modification Project Area would have provided raw materials suitable for the manufacture of stone tools, and the proximity of the Modification Project Area to Wollombi Brook, North Wambo Creek, Stony Creek and Wambo Creek suggests that the area would have been suitable for Aboriginal occupation.

Previous disturbance activities in the area include farming related practices such as clearing, grazing and slashing. Despite these modifications to the land, the soil landscape suggests that the Modification Project Area has the potential to contain *in situ* subsurface artefact deposits where the soils remain deep. Additionally, the vegetation (where not completely cleared) may possibly contain scarred trees.

An overview of the environmental context of the Modification Project Area indicates that there are rich food and raw material sources available. It would, therefore, have been a favourable area for Aboriginal occupation.

4.0 Aboriginal Heritage Context

The Aboriginal heritage assessment process requires that the significance of Aboriginal sites is assessed within a project area. Cultural significance is gathered by way of consultation with the Aboriginal community. In order to develop a predictive model for Aboriginal cultural heritage sites in the Modification Project Area, it is important for the local and regional context of the area to be taken into account. Historical records also provide additional information to assist with the interpretation of archaeological sites.

4.1 Historic Records of Aboriginal Occupation

It is necessary to acknowledge that early historical documents were produced for a number of reasons and may contain inaccuracies and/or bias in their reporting of events or other aspects of Aboriginal culture (L'Oste-Brown, Godwin and Potter 1998). Nonetheless, some historical documents provide important information and insights into local Aboriginal customs and material culture at the time of non-Indigenous settlement and occupation of the region.

In the late nineteenth century a number of writers described the Aboriginal peoples of the Hunter Valley. J W Fawcett (1898:152) described the "Wonnah-ruah [*sic*]" tribal district as that area drained by the Hunter River and its tributaries which covered some 2,000 square miles. He estimated the population in 1848 to have numbered between 500-600 peoples and provides details of some of their customs and dialect. This estimate of the population is similar to that reported by Robert Miller (1886:352) who quotes an informant from the Hunter River district as estimating the Wonnarua population in 1841 as being around 500 individuals. Miller also noted that by 1886 the population was almost extinct (1886:353).

According to Moore (1970:28) the Wonnarua territory was bounded by the Worimi who occupied the estuarine Hunter River and coastal land in the east, the Gamilaroi to the south-west, the Gewegal to the north-west and the Darkinjun to the south.

4.1.1 Aboriginal Implements

Fawcett (1898:152) provided a detailed description of the Wonnarua weapons and implements including the spear, woomera or throwing stick, shield, boomerang (both returning and non-returning), tomahawk or hatchet, flint knife, chip of flint or shell for skinning animals, club, yam stick for digging, bags of plaited swamp grass, wooden bowls, nets for catching fish and bark canoes.

4.1.2 Food and Useful Plants

Miller (1886:352) recorded that kangaroos, emus and reptiles were used as sources of protein and described how a variety of roots, most importantly that of the water lily, were roasted and eaten. Fawcett (1898:152) stated that wallabies, bandicoots, kangaroo rats, opossums [*sic*], rats, snakes, lizards, fish, shellfish, caterpillars, grubs, larvae of wasps, other insects and birds were used by the Aboriginal people as food resources.

W.J. Needham (1981) conducted interviews and research which resulted in a comprehensive study of Aboriginal sites in the Cessnock - Wollombi area. He describes *Xanthorrhoea australis* (grass tree), which is found in the Singleton area, as being an important resource (Needham 1981). Various parts of the grass tree were useful to make spear shafts, for sealing cracks in canoes and for securing stone tips in hunting spears (Needham 1981). It was also used to produce fire when two pieces of the dried flower stem were rubbed together (Needham 1981).

4.1.3 Campsites and Shelters

J.W. Fawcett (1898:152) described the preferred campsites of the “Wonnah-ruah [*sic*]” tribal district in the Hunter River catchment area as being located close to fresh water and food resources. A vantage ground was also favourable as a precaution against attacks on the camp.

The materials used to construct the campsites and shelters were made from organic matter which is highly unlikely to have been preserved in the archaeological record.

Fawcett (1898:153) also provided a description of the huts constructed for shelter. These huts were generally erected using forked sticks planted in the ground with straight sticks laid in the forks and covered over with sheets of bark sourced from local trees.

4.1.4 Clothing

Summer weather and the milder days of autumn and spring required little in the way of protective clothing; winter however, saw the use of animal skins for both clothing and as blankets (Heath n.d.:43). Miller (1886:352) describes Aboriginal people using possum skin cloaks with an ornamental nautilus shell suspended around the neck on a string.

4.1.5 Burials and Post Contact Phase

There are various reports concerning burial practices of Aboriginal people (Threlkeld in Gunson 1974). Burials appeared to be the most common form of internment with a well-documented preference for burials in sandy or loose soils, most likely resulting from the ease of digging a grave (Threlkeld in Gunson 1974).

4.2 Regional Archaeological Heritage Context

Archaeological evidence suggests that Aboriginal occupation of the Hunter Valley region began at least 35,000 years ago (Koettig 1987). Additional chronological evidence was recovered from the Hunter Valley's north-east mountains for which the following dates were assigned 34,580±650 (Beta-17009), >20,000 (Beta-20056) and 13,020±360 years before present (BP) (Beta-17271) (Koettig 1987, as cited in Attenbrow 2006). Kuskie (2000:215) identified artefacts at Wollombi Brook located in a clay horizon that have been dated to between 18,000 and 30,000 years BP. At Glennies Creek, approximately 50 km north-west of the Modification Project Area, Koettig and Hughes (1983) excavated a hearth on an alluvial terrace where the radiocarbon-dated charcoal and geomorphological evidence provided a date of between 10,000 to 13,000 years BP. These archaeological sites show that the Hunter Valley region was occupied during the Pleistocene, dated up to 11,000 years ago (Short 2000); Pleistocene sites are generally rare and therefore contain significant archaeological/scientific information as well as demonstrating the long occupation of Aboriginal people in the region.

The majority of Aboriginal sites in the region, however, are dated to the more recent Holocene (<11,000 years ago). This may reflect Aboriginal occupation patterns, but may also be influenced by the inaccessibility of potential coastal Pleistocene sites which were inundated when sea levels rose and reached present levels approximately 6,000 years ago (Mulvaney and Kamminga 1999:223). Evidence for Holocene Aboriginal occupation has been recovered from Bobadeen (7,760 calibrated years before present [cal. years BP]), as well as Milbrodale (1,420 cal. years BP) and Sandy Hollow (1,310 cal. years BP) (Moore 1970:58).

Ongoing archaeological investigations in the Hunter Valley have provided a basis for the development of predictive models of site distribution within this region. Studies completed by ERM Mitchell McCotter (2004) and Koettig and Hughes (1983) have demonstrated that open artefact scatters are common throughout the Hunter Valley, with large open sites generally located in proximity to large creeks that provided a more reliable source of potable water, with smaller open sites distributed through a variety of landforms including large and small creeks, slopes and crests.

Certain typological temporal markers such as backed blades and eloueras are present within the Hunter Valley assemblages. Whilst these provide only a gross indication of time scale, based on the age of the soils and the presence of backed artefacts, the majority of sites in the Hunter Valley are considered to date to the late Holocene period.

The majority of archaeological sites surrounding the Singleton LGA are dated within the Holocene period (between 11,000 BP and present time). Wheeler (2006:5) believed the large number of sites in the area which date to this period is the result of increased Aboriginal populations and 'intensification' of site usage during the Holocene. Alternately, the high frequency of recorded sites dating to the Holocene in the Singleton LGA may be due to the rise in sea levels around 6,000 BP erasing evidence of older sites located on the coastal margins.

4.2.1 Regional Archaeological Studies

Using colonial records Brayshaw (1986) conducted extensive research of the landscape and the known Aboriginal communities in the broader Hunter Valley area. Although the ethnographic literature refers to ceremonial grounds and carved trees, these represent only a small portion of the sites which would have occurred in the Hunter Valley. Camp sites would have occurred more commonly, but little is recorded regarding the locations of such sites. The literature does indicate that in the Hunter Valley, as elsewhere, Aboriginal numbers were quickly and greatly reduced by European diseases.

Brayshaw's research into the ethnographic record also showed the distinction between the material culture and goods manufactured in inland and coastal areas, dependent on the resources available. The exchange of goods between inland and coastal inhabitants was also evident. Bark was probably the most commonly utilised raw material, associated with the construction of huts, canoes, cords, nets, drinking vessels, baskets, shields, clubs, boomerangs and spears. Being an organic material, very few such artefacts survive today. Scarred trees, carved trees, burial sites, ceremonial or bora grounds, cave paintings, rock engravings, axe grinding grooves, quarries and wells have all been recorded in the Hunter region. The distribution of these sites would generally have been reliant on environmental and cultural factors such as resource availability.

The colonial records describe the Hunter Valley as having tall cedar trees in the Paterson and Wallis Plains, in addition to lagoons, silted flood channels and open swamps. The clearance of the vine forests below Maitland changed the landscape dramatically. The Hunter Valley region was prone to both drought and flooding.

Surveys undertaken in the surrounding Warkworth and Jerry's Plains areas include, but are not limited to, those by Dyal (September 1979), Dyal (November 1979), Brayshaw (1981), Brayshaw and Haglund (1984), Koettig and Hughes (1983) and Australian Museum Business Service (2002).

4.2.2 Local Archaeological Heritage Context

The local Aboriginal heritage context provides a review of previous archaeological work conducted in the local landscape, identifies whether Aboriginal sites have been previously identified in the Modification Project Area using the AHIMS database and informs the predictive model of Aboriginal sites for the Modification Project Area. The review of previous archaeological work includes relevant local research publications as well as archaeological consultancy reports. Two types of archaeological investigation are generally undertaken; excavation and survey. Archaeological excavations can provide high resolution data regarding specific sites, such as the dates or chronology of Aboriginal occupation and information on stone tool technology (reduction sequences, raw material use, tool production, use wear and retouch). Archaeological surveys generally cover wider areas than excavations and can provide important information on the spatial distribution of sites. The detection of sites during survey can be influenced by the amount of disturbance or erosion and therefore sensitivity mapping is sometimes also required to interpret survey results. The local Aboriginal heritage context also provides a framework for assessing local significance.

4.2.3 Local Archaeological Studies

A number of archaeological surveys have been undertaken in the Hunter Valley, including some in areas relevant to the Modification Project Area. The investigations most pertinent to the current Modification Project Area are summarised below. The information from the previous work will assist with predictive modelling by identifying potential archaeological sites and allowing for planning and management recommendations to be formulated with confidence.

A comprehensive study covering the area to the east of the Wambo and Jerrys Plains ridgelines (including the Modification Project Area) was undertaken by White (2003). The results of the Environmental Impact Assessment (White 2003) showed that there were a large number of artefact scatters and isolated finds in the area, together with evidence of raw materials for making stone tools, ochre and an abundant supply of fauna and flora, all of which would have been useful resources.

Occupation areas or open camp sites were generally located on the gently sloping areas in close proximity to water. In particular, they were identified along major creek lines and at the confluence of major tributaries of North Wambo Creek, Wambo Creek, Waterfall Creek and Stony Creek. These creeks and their tributaries drain into Wollombi Brook and the Hunter River. The Hunter River lies to the north and north east of the Modification Project Area, Wollombi Brook lies directly to the east and Wambo Creek and Stony Creek lie to the south and south-west.

Wambo and Jerrys Plains Ridges lie to the south-west of the Modification Project Area and the upper slopes comprise vertical sandstone cliffs with very steep screed and talus slopes. These north east facing ridgelines are difficult to access and it is considered were unlikely to have been used for regular access through the mountains. The upper slope areas are covered in conglomerate sandstone boulders and stony scree, the mid slope areas are moderately sloping and are incised by a number of ephemeral creek lines. These areas are densely treed. The foot and toe slope areas are gently sloping and easily accessible and are generally cleared lands from previous farming practices. There is evidence of extensive flooding of the major creek lines in the region and the major waterways, the Hunter River, Wollombi Brook, Wambo Creek, Stony Creek and North Wambo Creek, have extensive floodplains on either side. Much of the Modification Project Area is in an area that shows evidence of numerous inundation events which laid down extensive alluvial deposits.

As substantiated by the density of artefact scatters and open camp sites in the foot slope and toe slope areas, it is considered likely that occupation was generally on the easily accessible sloped areas and on either side of the major creek lines outside of the flood area or above the flood line. These locations would have provided convenient access to food and raw material resources.

The results of other archaeological studies undertaken in the local area show that the elevated area to the south-west of North Wambo Creek has a higher density of artefact scatters and isolated finds than the floodplain area to the north east of Wambo Creek. As such this area appears to have been more densely occupied or used in the past than the heavily inundated area that forms much of the Modification Project Area.

Dyall, L.K 1980. Report on Aboriginal Relics on Wambo Coal Lease, Warkworth

Dyall was commissioned to undertake an archaeological survey for further development works incorporating an extension of the existing open cut and pit mining at Wambo Mine. Dyall conducted further survey work on the northern and western banks of Wollombi Brook to the west of Warkworth and on the opposite side of the creek to the 12 previously recorded artefact scatter sites A – L and grinding groove Site M (Dyall November 1979). The survey area was bounded to the south-west by North Wambo Creek.

The archaeological survey identified six artefact scatter sites and an axe grinding groove site with two grinding grooves. Three “Bulga Knives” were identified at an artefact scatter site on the northern bank of North Wambo Creek, an edge-ground axe, several edge-scrappers, flaked cobbles, a backed blade (Bondi Point) and a scraper of bottle glass. No rock engravings or scar trees were located and no rock outcrop suitable for containing a rock shelter or overhang was identified. Dyall noted that sandstone and other sedimentary rock types were evident with lenticular limestone cobbles as well as basalt pebbles.

An artefact site with around 20 flakes and flaking cores and a number of basalt axes was identified on a neighbouring vineyard at Greenhault Farm on the west bank of Wollombi Brook. According to the ethnographic record this was a “meeting place” for the local Aboriginal people and coastal tribes. Dyall recorded that sites were generally located close to creek lines.

Dyall, L.K (1981) Report on the Aboriginal Relics on Wambo Coal Lease, Warkworth

Dyall (1981) carried out an archaeological survey of the northern part of the Wambo Coal Lease area. This survey extended from the north bank of North Wambo Creek to the northern boundary of the Lease and eastwards to Wollombi Brook. He recorded seven sites, six being open camp sites and one an axe grinding groove site.

The open sites were small to medium in size. Four of the sites consisted of 20 – 50 flakes along minor tributary gullies. Of these, site #37-5-0032 consisted of three ‘bulga knives’ on the northern bank of North Wambo Creek, site #37–5-0034, located at the confluence of North Wambo Creek and Wollombi Brook, had over twenty artefacts, mostly heavy flaking cores and the axe grinding groove site consisted of a small sandstone boulder with two axe grinding grooves and three small circular pits.

Brayshaw, H. 1984. Archaeological survey at Wambo near Warkworth, NSW.

Brayshaw (1984) undertook an archaeological survey at Wambo to the south of Redbank Creek and to the west of Wollombi Brook. The survey included the entire central creek line including the area to the north, a small flow line and a number of exposed ground surface areas. Accessible ridge lines and slopes were surveyed where possible. The investigation was conducted by vehicle and on foot. Stone artefacts were found at three locations along the central watercourse. Although the numbers of artefacts found at these locations were very small it was concluded that they conformed to patterns identified in larger Hunter Valley investigations. It was recommended that consent to destroy the sites be obtained with the exception of Site #37-6-0135, at which test excavations should be undertaken prior to consent to destroy being granted (Brayshaw 1984).

Corkill 1990. Preliminary Survey for Archaeological Sites at South Wambo, near Warkworth, NSW

Corkill (1990) was engaged to conduct an archaeological survey along Wambo Creek and Stony Creek. The total area surveyed was approximately 5.5 km. Six artefact scatters and nine isolated finds were identified, including an isolated find in the Modification Project Area (37-5-0293). Corkill then conducted a test excavation in the area which identified several hundred artefacts. Retouched, backed blades and scrapers were identified amongst the assemblage (Corkill 1990).

Rich E. 1991a Aboriginal Sites at Wambo, near Bulga in the Hunter Valley.

Archaeological survey and test excavation were carried out along Wambo Creek (Rich 1991a) (known locally as Wambo Creek), Stony Creek and North Wambo Creek. These creeks drain from the Wollemi escarpment and flow into Wollombi Brook north of Bulga. The investigations were carried out for Wambo Mining Corporation as part of environmental impact studies for proposed open cut and underground mining.

A total of 29 sites were recorded. Four were found along Wambo Creek, four along Stony Creek and 21 were located on the banks of North Wambo Creek. The sites varied from small camp sites with a few artefacts to very extensive camp sites with hundreds of artefacts. Hearths and grinding grooves were also recorded.

Rich E. 1991b Investigation of Aboriginal Sites SW3 and SC4 at South Wambo, near Bulga, NSW.

Rich (1991b) undertook test excavations at two sites on Wambo Creek; both sites were located on spurs above creek flats. Artefact densities were recorded to be low to moderate. Site SW3 was on a colluvial terrace with sediments 70 centimetres (cm) deep and the possibility of stratified soil was indicated (Rich 1991b).

Rich. 1991c. Proposed Open Cut and Underground Mining at Wambo, near Warkworth in the Hunter Valley, NSW: Archaeological Survey for Aboriginal sites.

Envirosciences Pty Ltd (Rich 1991c) was commissioned by Wambo Mining Corporation in regard to their proposed extension of their existing open cut and underground mines at Wambo, located on the west side of Wollombi Brook at Warkworth in the Hunter Valley. A survey was conducted along Stony Creek which is approximately 1.5 km long and varies from 250 m to 460 m wide. This area was selected by Envirosciences Pty Ltd for the survey in order to determine whether sites were likely to occur within the project area, as sites commonly occur along creeks.

Two isolated finds and 17 artefact scatters were found within the survey area along North Wambo Creek. A possible scarred ironbark tree was observed adjacent to Wollombi Brook, 600 m east of the survey area. Three artefact scatters and four isolated finds were found along Stony Creek. Most of the sites were open sites, consisting of stone artefacts eroding out of Unit A deposits or lying on eroded Unit B clays. Eroding hearths were seen at two sites and the possible remains of a destroyed hearth at a third site. A stone structure which was considered to be a possible heat treatment oven was found at another site. An axe grinding groove site with at least seven grooves and a boulder with two grooves was also identified. The sites were considered archaeologically significant as they displayed considerable variation in their contents.

Envirosciences Pty Ltd recommended that an archaeological test excavation be carried out at Site 1, adjacent sites #37-5-0030, #37-5-0031, #37-5-0033 and Isolated Find 1 to determine their significance. It was recommended that if mining were to proceed the route of the North Wambo Creek diversion channel should be retained in or near its present location to avoid Site 3 and that a management plan be developed for the area of the Group 2 sites along North Wambo Creek to address erosion of the sites and future land use. Programmes to monitor subsidence in A298 which are required by the Department of Minerals and Energy should be designed to incorporate monitoring of Aboriginal sites already known for the area (Rich 1991c).

Rich stated that some of the sites along North Wambo Creek were of considerable archaeological significance as a variety of stone artefacts and a knapping floor were present. The sites along Wambo Creek were also considered by Rich to be of archaeological interest as she identified a number of backed blades and noted a number of differences to the sites found along North Wambo Creek. Rich considered that the sites along all three creeks had the potential to provide archaeological information on changing Aboriginal land use through time. Rich stated that the underground mining works were unlikely to harm the Aboriginal sites along Wambo Creek and Stony Creek. The 16 sites along North Wambo Creek were located away from the open cut mining area and these sites included the axe grinding grooves, hearths, knapping floors, bulga knives, scrapers and other tools which she considered were sites of archaeological significance and should not be impacted upon by the proposed works (Rich 1991a).

Kuskie, P. J. 1998. An Archaeological Assessment of the Proposed Wambo Mine Conveyor and Haul Road, near Warkworth, Hunter Valley, New South Wales.

Kuskie (1998) conducted an archaeological survey for a proposed mine conveyor and haul road. The main artefact types recorded included cores and core fragments and flakes and flake fragments of rhyolitic tuff and silcrete (Kuskie 1998).

Kuskie, P. J. 2000. Jerrys Plains coal terminal and rail line: an Aboriginal assessment of several haul road options at United and Lemington Collieries, Hunter Valley, New South Wales.

Kuskie (2000) conducted an archaeological assessment for proposed haul road routes from United and Wambo leases to Lemington colliery as part of the proposed Jerry's Plains Coal Terminal and Rail Line. Six sites which included five artefact scatters and one isolated find were identified by the survey within United Colliery's lease boundary (Kuskie 2000).

White, E. 2003. Aboriginal Heritage Assessment for Resource Strategies Pty Ltd. Wambo Development Project – (Environmental Impact Statement).

White (2003) conducted an archaeological Aboriginal heritage assessment of the proposed Wambo Development Project. The existing Wambo open-cut and underground mines are located on the west side of the Wollombi Brook and south of the Hunter River. This study was part of an Environmental Impact

Statement (EIS) prepared by WCPL (White 2003). The study area was relatively large, covering approximately 60 square kilometres (km²). It was located on the eastern edge of high sandstone country, adjoining Wollemi National Park. The primary objective of the study was to assess the impact which the project would have on Aboriginal heritage.

The study identified a total of 292 sites in the project area or in proximity to the proposed rail line. From historical records, a carved tree site was identified on the eastern edge of the area. While the trees have been destroyed since the site was recorded in 1918 the site is still of considerable value as a ceremonial area to the Aboriginal community and additional research by Brayshaw (2003) was carried out to locate the site more accurately.

Other site types identified in the project area include grinding grooves, a probable scarred tree, two sites with glass artefacts and two other sites which included historical materials indicating they may have been contact sites. Two locations have been identified as potential dateable geomorphic contexts, a red sand body on which two sites were identified and a yellow sand dune east of Wollombi Brook. The remaining sites are open artefact scatters and isolated finds. One hundred and ten isolated finds were identified along with 69 artefact scatters of only two to four visible artefacts. Only 18 sites had more than 50 artefacts. Based on the analysis of artefact distribution White identified a total of 20 potential Aboriginal site locations. The analysis undertaken by White of the artefact assemblages found variation in the distribution of stone raw materials across the study area, particularly silcrete (White 2003).

In addition to the above described archaeological studies, several other relevant studies were reviewed and their findings considered as part of this study. These additional studies include: Effenberger (1992), ERM Mitchell McCotter (1999), Silcox (1998) and Sutton (2002).

RPS, 2012. Cultural Heritage Impact Assessment: North Wambo Underground Mine Modification.

RPS (2012) were commissioned by WCPL to undertake an Aboriginal and non-Indigenous CHIA for an EA as part of a Section 75W modification to Wambo Development Consent (DA 305-7-2003) granted by the Minister for Planning on 4 February 2004.

The modification included the development of two additional longwall panels in the Wambo Seam contiguous with the existing NWUM (Longwalls 9 and 10). The project area was situated to the west of Wollombi Brook, south of North Wambo Creek, with Stony Creek traversing the southern boundary. A 70 m buffer was incorporated around the outside of the project area boundary to ensure that adequate survey coverage had been undertaken.

A number of Aboriginal sites were found to have been previously recorded within the project area boundary and buffer, including 11 artefact scatters and seven isolated finds that had been previously recorded on the AHIMS database. The CHIA prepared for the North Wambo Underground Mine Modification (Longwalls 9 and 10) identified 16 new sites. Therefore the field survey of the project identified a total of 24 artefact scatters, nine isolated finds and one possible scar tree. Sites previously identified by White (2003) and those recorded on the AHIMS database were groundtruthed. The majority of sites identified within the project area were located along crests, upper and mid slope areas of the rolling hills and on the lower slope areas above the floodplain.

An inspection was also made of areas that had been previously mined by longwall mining to view the impact of subsidence on artefact sites in those areas to that time. The Aboriginal community determined that if subsidence impacts were minimal then it was unlikely that artefact sites would suffer impact. However, where subsidence predictions were moderate to high and where Aboriginal sites were likely to be affected by subsidence, mine infrastructure or use of access tracks then the sites would require salvage (RPS 2012).

As described above, there have been extensive assessments carried out in the vicinity of the Modification Project Area. It is assumed all available and up-to-date information has been assessed and presented in this CHIA, however minor limitations such as unidentifiable AHIMS errors may exist. It is assumed that all relevant cultural knowledge that may have the potential to be harmed by the proposed Modification has been provided by the RAPs during the CHIA consultation process.

4.3 Aboriginal Heritage Information Management System

A search of the OEH AHIMS database was undertaken on the 23 May 2014 using three separate sets of co-ordinates in order to effectively cover the Modification Project Area and its regional environs. These were Polygon 3 Zone 56 Eastings 304247-315731 and Northings 6387345-6390500 (118 sites); Polygon 3a Zone 56 Eastings 305547-311610 and Northings 6390500-6393655 (107 sites); and Polygon 3b Zone 56 Eastings 311610-315730 and Northings 6390500-6393650 (117 sites). The AHIMS searches are included in **Appendix 4** and details of site cards in **Appendix 5**.

The AHIMS search results revealed that although there were 342 registered sites that had been previously recorded within the wider area, there were only five previously recorded sites within the Modification Project Area. The five sites were all artefact scatters and included AHIMS #37-5-0195 (Wambo Sites 40, 41, 42), #37-5-0644 (Wambo Site 336) and #37-5-0625 (Wambo Site 363). It should be noted that AHIMS#37-5-0195 incorporates three site locations (Wambo Sites 40, 41, 42), as per the site card submitted to OEH.

A review of the sites within a 2 km x 2 km search area: Zone 56 Eastings 310185-312177 and Northings 6390152-6392196, to identify the site patterning in the area directly relating to the Modification Project Area was undertaken with the following results shown on **Table 4**.

Table 4 Summary of AHIMS Search Results of Sites in Proximity to the Modification Project Area ordered by Site Type and Frequency

Site Type	Frequency	Percent
Artefact Sites – Artefact Scatters and Isolated Finds	29	75.00
Grinding Groove	5	12.50
Earth Mound	1	3.125
Earth Mound with Artefact	1	3.125
PAD	1	3.125
Possible Scarred Tree	1	3.125
Total	38	100

Source: AHIMS 23 May 2014 (Appendix 4).

It was identified that there were a number errors on the AHIMS database which included incorrect coordinate data and incorrect site features. AHIMS #37-5-0188 was on the AHIMS database as an artefact scatter but the site card shows the site to be a scarred tree, being Wambo Site 32. There were three sites recorded on a single site card, namely AHIMS#37-5-0195, Wambo Sites 40, 41 and 42, but the site name on the card is SW3 Story Creek. AHIMS 37-5-0196 is Wambo Site 44 but the name on the site card is Harris House. A large number of the sites are shown as artefact sites, number of artefacts unspecified, but the site cards clearly show whether they are isolated finds or artefact scatters. In light of these discrepancies the data has been recalculated (using the correct actual data rather than the inaccurate AHIMS data) combining all three artefact site types together (artefact scatters, isolated finds and artefact sites with number of artefacts unspecified).

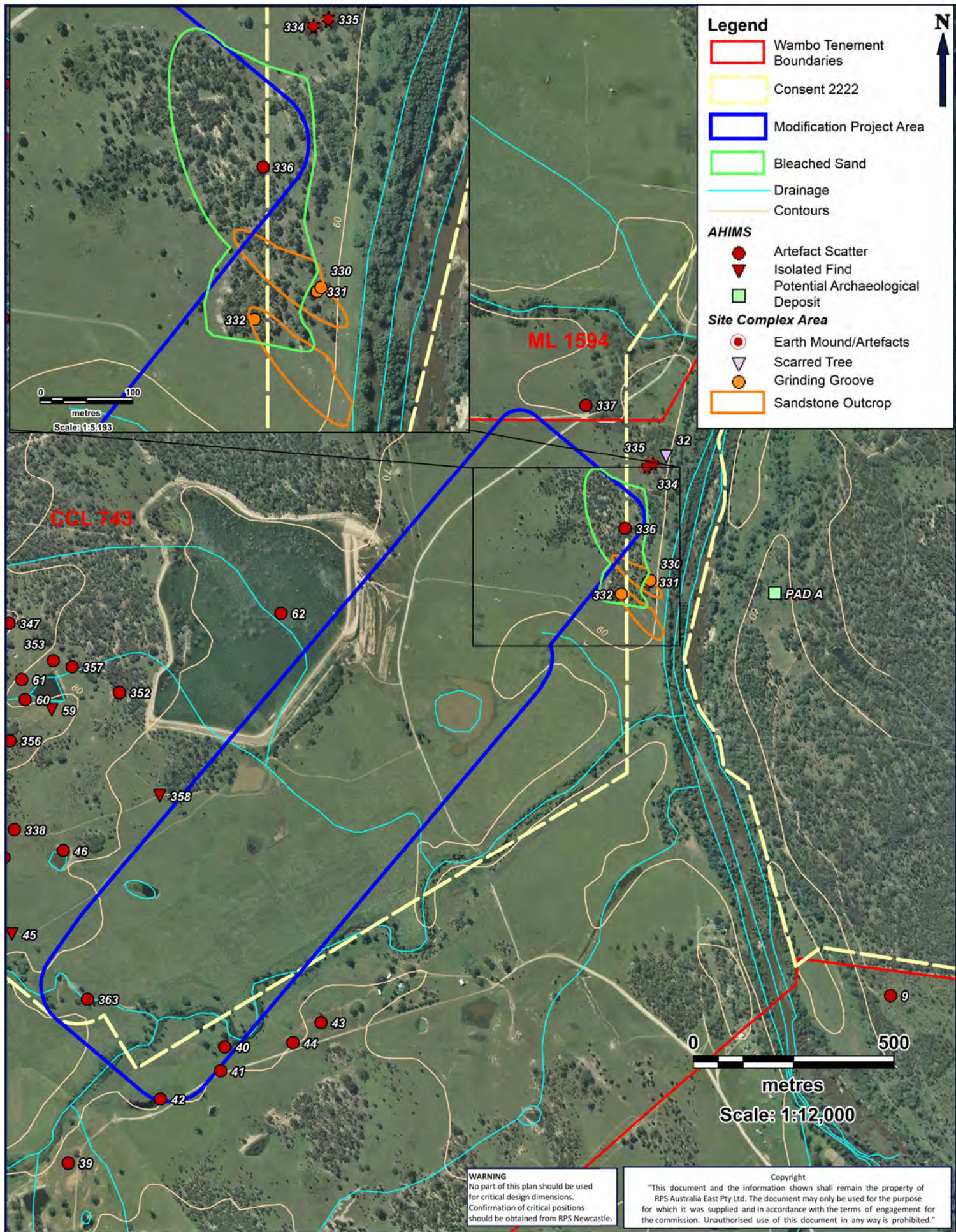
An additional AHIMS search was undertaken on 25 June 2014 at Zone 56 Eastings 310185-312177 and Northings 6390152-6392196 to ensure that the new sites identified during the recent search in the area directly relating to the Modification Project Area (search area approximately 2 km x 2 km) had been recorded

on the AHIMS database correctly (**Figure 5**). This additional AHIMS search showed that there were 38 sites recorded on AHIMS within this search area. It was found that all six new sites had been added to the database but that the five isolated find sites had been added as artefact sites and the number of artefacts unspecified, although the grinding groove site had been added correctly. Notation of the discrepancies was made.

The search results were correlated with the results of previous surveys including the findings of White (2003) for the EIS (refer Section 4.3.1). Stone artefact sites were the predominant site type and included isolated find sites and artefact scatter sites. Stone artefacts generally are found in flat or gently sloping, open regions and on level, well drained land features in close proximity to water courses. In the regional area artefact scatters and isolated finds make up the majority of site types. Raw materials used were predominantly indurated mudstone and silcrete, plus quartz, quartzite, chert, basalt, dolerite, tuff, petrified wood, sandstone and rhyolite. Artefact sites were predominantly close to permanent water. One scar tree was identified, grinding groove and grinding surface sites, earth mounds (one of them with artefact) and an extensive artefact scatter associated with a sand body and forming part of a complex site were also recorded on the AHIMS database (outside of the Modification Project Area).

A bora ground AHIMS #37-5-0056 (Wambo Site 2) has been recorded in the region, but this site is more than 2 km to the east of the Modification Project Area. The bora ground is located on the eastern bank of Wollombi Brook to the south-east of the Modification Project Area. The bora ground will not be impacted by the Modification, and therefore is not considered further in this CHIA.

Grinding grooves are often found on large open and relatively flat areas of sandstone shelving and outcrops in close proximity to water, such as the exposed sandstone along rivers and other tributary drainage lines and swamps. Several grinding groove sites have been found on the bank of Wollombi Brook to the east of the Modification Project Area: AHIMS #37-5-0638, #37-5-0639 and #37-5-0640 (Wambo Sites 330, 331 and 332). North of Wambo Creek at the confluence with Wollombi Brook, another grinding groove site AHIMS #37-5-0637 (Wambo Site 329) has been recorded. All of these grinding groove sites are located outside of the Modification Project Area and will not be subject to any potential impacts as a result of the Modification.



TITLE: FIGURE 5: MODIFICATION PROJECT AREA WITH AHIMS & RECORDED ABORIGINAL SITES

LOCATION: NORTH WAMBO
LW10A MODIFICATION

DATUM: (GDA 94)
PROJECTION: MGA ZONE 56

DATE: 2/07/2014
PURPOSE: HERITAGE

LAYOUT REF: J:\J085\Wambo\Wambo Mapping Database
Meeting 20140511
VERSION (PLAN BY): C A4 (GG-NW)

CLIENT: WAMBO COAL PTY LTD
JOB REF: 108453-3

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
241 DENISON STREET BROADMEADOW PO BOX 428 HAMILTON NSW 2303
T: 02 4940 4200 F: 02 4961 6794 www.rpsgroup.com.au

RPS

Scar trees are usually found in close proximity to water or on easily accessible slopes. A previously recorded scar tree site AHIMS #37-5-0188 (Wambo Site 32) is erroneously listed in the extensive search as an artefact site. Two earth mounds AHIMS Site #37-5-0642 and AHIMS #37-5-0643 (Wambo Sites 334 and 335) lie to the north east of the Modification Project Area. Both the scar tree site and the earth mound sites are located outside of the Modification Project Area and will not be subject to any potential impacts as a result of the Modification.

To the west and outside of the Modification Project Area are the mid slopes and upper slopes of rolling hills and the very steeply sloping screed and talus slopes with vertical sandstone cliffs which form the Wambo and Jerrys Plains Ridgelines that trend from the north west to the south east. These north east facing ridgelines are generally inaccessible and were unlikely to have been utilised as trading routes as there are more accessible passes through the mountains to the north-west and south-west of the Modification Project Area.

On the eastern side of Wollombi Brook the area has been relatively less disturbed by farming or mining practices. Much of it is an elevated landform above the floodplain. The vegetation has been subject to lower levels of land clearing and there is extensive bush regeneration in some area. Some mature trees remain in the vegetated areas to the east of Wollombi Brook, a number of which show evidence of cultural scarring. Sandstone of a type suitable for use for grinding stone tools occurs to the south east of Wollombi Brook. A Potential Archaeological Deposit (PAD) had been identified in the elevated area to the east of the Wollombi Brook during previous survey efforts.

4.3.1 Summary of AHIMS search results

The AHIMS results show that the majority of recorded site types occurring in the Modification Project Area and in the area to the west of Wollombi Brook are artefact sites (artefact scatters and isolated finds). The results of the AHIMS searches show that the area would most likely have been used for camping and resource procurement, particularly with relation to Wollombi Brook to the east, North Wambo Creek to the north, and Wambo Creek and Stony Creek to the south. The Modification Project Area is characterised by an extensive floodplain which lies to the north of Wambo and Stony Creeks, to the west of Wollombi Brook and to the south of North Wambo Creek. The landscape is gently sloping with an elevated landform close to the confluence of North Wambo Creek and Wollombi Brook and a low lying area to the south of the confluence of Wambo Creek and Stony Creek in the southern part of the Modification Project Area.

Only five previously recorded sites are located within the Modification Project Area being five artefact scatters AHIMS #37-5-0195 (Wambo Sites 40, 41 and 42) and AHIMS #37-5-0644 and #37-5-0625 (Wambo Sites 336 and 363). Sites in proximity to the Modification Project Area are shown on (**Figure 5** and **Table 4**). In spite of a large number of extensive surveys undertaken in the Modification Project Area, no sites have been previously found in the area of the floodplain within the Modification Project Area.

4.4 Predictive Model for Archaeology in the Modification Project Area

A predictive model is created to give an indication of Aboriginal sites likely to occur within the Modification Project Area. It draws on the review of the existing information from the regional and local archaeological context and the environmental context. The predictive model is necessary to formulate appropriate field methodologies in addition to providing information for the assessment of archaeological significance.

There are a number of factors which influence Aboriginal occupation of an area. These include essential subsistence resources such as food (flora and fauna), and fresh water. Additionally, floral and faunal resources were used for clothing, medicines, shelter and baskets and shields. Raw stone materials were utilised for the manufacture of tools and weapons. Ridges, flat elevated areas and rock shelters would have been favoured as places for occupation. Cultural or spiritual sites, such as corroboree sites, mythological places and initiation sites, may have been associated with certain landforms or specific sites or areas in the landscape.

4.5 Site Predictions

The following site predictions for the Modification Project Area have been made on the basis of the environmental context, available historic observations of Aboriginal people in the region, previous archaeological studies and surveys and analysis of the AHIMS data.

4.5.1 Site Type

The Modification Project Area is located inland in an area which has been extensively farmed and mined. On the basis of the AHIMS data and the information available from previous archaeological investigations, it is considered that artefact sites (scatters and isolated finds) would be the most likely site type to be present in the Modification Project Area.

Other sites such as grinding groove sites, sandstone grinding surfaces, earth mounds and a scar tree have also been identified in the AHIMS data as being located in proximity to the Modification Project Area, but it is noted that none of these sites are located within the Modification Project Area.

4.5.2 Site Locations

The majority of artefact scatters and isolated finds in the vicinity of the Modification Project Area have previously been identified within 200 m of a watercourse on elevated landforms above the floodplain to the south of Wambo Creek, on the upper banks of Wollombi Brook and the southern bank of North Wambo Creek. This indicates that the locations in the Modification Project Area with the highest potential to contain artefact sites would be those near watercourses or drainage lines, and generally above the floodplain which forms much of the Modification Project Area.

Locations likely to contain grinding grooves and sandstone grinding surfaces would be sandstone sheets associated with the creek lines, especially with more permanent water bodies like Wollombi Brook. Scar tree sites are more likely in areas where mature trees remain. Sites most likely to occur would be artefact sites, which would most likely be found on areas of elevated land in the north eastern part of the Modification Project Area to the west of Wollombi Brook and the elevated area to the south of Wambo and Stony Creeks above the floodplain.

4.5.3 Site Contents and Raw Materials

A review of previous archaeological investigations in the local area indicated that artefact scatters and isolated finds generally comprise flaked stone artefacts manufactured predominantly from mudstone and silcrete, with minor representations of tuff, quartz and quartzite and occasionally basalt, chert, chalcedony, petrified wood and felsic volcanics. It is therefore predicted that sites with artefacts within the Modification Project Area would be characterised by flaked stone tools, cores and flakes largely manufactured from mudstone and silcrete.

The AHIMS data from the local area have also indicated the presence of scar trees which may contain more than one modified surface, and flat lying sandstone sheets which may have been utilised for grinding purposes and other associated activities. One scar tree, two earth mounds and a number of grinding surfaces have been previously identified along the bank of Wollombi Brook adjacent to the Modification Project Area. As described in Section 4.4 above, all of these sites are located outside of the Modification Project Area and as such will not be subject to any potential impacts as a result of the Modification.

4.5.4 Site Condition

Due to the effects of previous land use, such as extensive clearing, sheet wash erosion, dam and fencing construction, grazing livestock and the highly disturbed nature of the area, it is predicted that the Modification Project Area would be unlikely to contain any deep sub-surface archaeological deposits and that any archaeological deposits that may be present were unlikely to retain spatial or stratigraphic integrity.

Previous land clearing and land use is deemed to have lowered the likelihood of any scarred trees being identified in the area. Outcrops of sandstone occur within the Modification Project Area, however all previously identified grinding surfaces associated with Wollombi Brook and its tributaries are located outside of the Modification Project Area. It is considered that there is a low likelihood of sandstone outcrop occurring in the floodplain that forms much of the Modification Project Area, and that there is a low likelihood of finding sandstone surfaces that may have been used for grinding purposes in the remainder of the Modification Project Area. Previous farming practices and modifications to the land surface in the area are likely to have had an adverse affect on any archaeological features.

5.0 Historic Heritage Context

5.1 Historical Overview

Initial contact between Aboriginal and non-Aboriginal people in the Upper Hunter Valley was in 1797. Permanent settlement of the Hunter Valley was established in 1804 with a penal colony for the convicts who had been deemed unsuitable to remain in Sydney (generally, re-offenders). While the lower Hunter was developed on a foundation of industrial production, the Upper Hunter maintained a predominantly agrarian purpose. An important figure in the early exploration of the Upper Hunter was John Howe, who first commented on the suitability of the land for agricultural use. The narrow floodplain between Aberdeen and Patrick's Plains was declared to be "...*The finest sheep land I have seen since I left England...The grass on the low ground is equal to a meadow in England* (Wood 1972)".

The town of Singleton was named after Benjamin Singleton, who had taken part in the navigation of an overland route between the Hawkesbury and Hunter Rivers. He was granted land on the site of what is presently the town of Singleton by Governor Brisbane in 1823 (Wood 1972). Singleton settled on this land and established a residence. In 1827 Singleton set up the first inn in the area, called The Barley Mow, which was followed by the establishment of a flour mill in 1829 and a post office. The railway arrived in Singleton in 1863 and assisted in the further development and economic prosperity of the town (Appleton 1963).

5.2 Local History

5.2.1 Warkworth

The Cockfighter Creek was the first name given to the Warkworth area in 1820. By 1840 there were three hotels and it was the stopping place for the coaches from Sydney. In general, land in the Warkworth area was leased by crown grants and used as grazing land. There was little significant construction undertaken on this land (Weir and Phillips 2007:4).

In January 1863, the *Real Property Act 1862* was introduced and many larger leases were divided into smaller lots. This was the beginning of the dairy industry of the Hunter Valley, which was subsequently strengthened by the completion of the Hawkesbury River Railway Bridge in 1888 (Weir and Phillips 2007:4). Until World War II, dairy farming, timber felling and grazing remained the most dominant industries in the Upper Hunter.

5.2.2 Jerrys Plains

In November 1819, John Howe reached Jerrys Plains via Windsor (Brayshaw 1987:9) along a route which later became known as the "Bulga Tack" and is the present day Putty Road. The name Jerrys Plains was taken from the name of one of Howe's men, a convict named Jerry Butler, who died in the area during the course of their exploration. The first printed use of the name Jerrys Plains appears in the newspaper *The Australian* on the 4th February 1827 and subsequently in the 1828 census.

Throughout the 1820s, Jerrys Plains was populated sparsely, with approximately 500 people living in the Paterson Plain and Patrick Plain districts. This small population may have been a result of a drought, which was observed by Reverend J. D. Lang upon his arrival in the Hunter in 1828. Once the Putty Track and the Great North Road were established during the late 1820s to early 1830s, growth in rural commerce and local industries saw an associated increase in the population of the area.

Constable J. Needham became the first Police Officer in Jerrys Plains in 1827. By 1831 government officials had decided to establish a mounted police station in the town due to the increased number of burglaries in the district and to assist in the dealings between Europeans and Aboriginal peoples. Barracks and officers quarters were constructed in the official village reserve in 1832. In March 1833, the headquarters of the Hunter River division of the Mounted Police was transferred to Jerrys Plains from Maitland.

A Post Office was established in 1837 and an ex-convict, Robert Thomas Capp, was the first Postmaster. By this time, Jerry's Plains had become an important junction between Maitland and Cassilis on the Gammon Plains near Merton, and further to Bathurst. In 1844, the first school was established in the town by the Church of England. The residents of the town petitioned the government for a public school in 1847, however, it was not established until 1881.

5.2.3 Wambo Homestead

James Hale, a former convict, began acquiring the property of Wambo during the 1830s, in individual parcels eventually amounting to about eight thousand acres. The first buildings of the Wambo Homestead were constructed in 1832, with major extensions made in the mid-1840s. In 1850, James Hale's stepson, William Durham, settled at Wambo with his family and property became known for its Durham cattle. A coal seam was discovered in 1863 during the sinking of a well, though the property remained pastoral land for another one hundred years. In 1891, after the death of William Durham, the property was inherited by his sons William and Charles, who sold it to Benjamin Richards in 1894. It was sold again in 1898 to the Ridge-Badgery partnership and then resold in 1905 to the Allen-Macdonald partnership and established as a thoroughbred horse stud.

The property was then subdivided in 1908, with the Homestead and South Wambo retained by the Allen-Macdonald partnership until 1915 when ownership of the Homestead passed solely to the Macdonald family. Between this time and 1971, the primary uses of the remaining Wambo land were grazing and dairying. The Macdonald family then sold the majority of their land to the Wambo Mining Corporation in 1971, maintaining possession of the Homestead block until it was sold to John Birks in 1983. Birks resold the Homestead to the Wambo Mining Corporation in 1987 (EJE Heritage 2006:5).

5.3 Historic Registers

Historic registers are used to record items of significance at the National, State and Local government level. There are no items registered in the National Heritage Database for the Modification Project Area. However, there is one item listed on the NSW Heritage Inventory at both State and Local Government level, the Wambo Homestead.

5.3.1 National Heritage Database

The Australian Heritage Database incorporates: the National Heritage List; the Register of the National Estate and the Commonwealth Heritage List.

The [National Heritage List](#) is now the lead statutory document for the protection of heritage places considered to have national importance. This list comprises Aboriginal, natural and historic places that are of outstanding national heritage significance to Australia. Listed places are protected under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). There are no items within Wambo MOL on the National Heritage List.

Prior to this the [Register of the National Estate](#) was the primary document. While the Register of the National Estate still exists it is now frozen and no longer has statutory status. The Minister is required to consider the Register when making some decisions under the EPBC Act. The Register of the National Estate does not include any heritage sites within Wambo MOL.

The [Commonwealth Heritage List](#) comprises natural, Aboriginal and historic heritage places owned or controlled by the Commonwealth. Places on this list are also protected under the EPBC Act. No items within the boundaries of Wambo MOL are listed on the Commonwealth Heritage List.

5.3.2 The NSW Heritage Inventory

The NSW Heritage Inventory lists items at the NSW (State) level and/or at the local level. Items of State significance are registered by the NSW Heritage Council under the *Heritage Act 1977*. Those items are listed on the State Heritage Register as being under an Interim Heritage Order or protected under Section 136 of the NSW Heritage Act.

The Inventory also includes some heritage places of heritage significance within a LGA. These places are listed by local council under their LEP and additionally may be included on the NSW Heritage Inventory database.

There is one item listed at State Significance level for the Singleton LGA located on Wambo MOL (**Table 5**). The Wambo Homestead Curtilage boundary is approximately 60 m from the current Modification Project Area; the Homestead and associated structures are approximately 960 m distant.

Table 5 Items listed on the NSW Heritage Inventory

Name of Item	Address	Level of Significance
Wambo Homestead	Wambo Mine, Warkworth	NSW Heritage Act

5.3.3 Local Government Heritage Registers

Items of significance at the local government level are included in the LEP as Heritage Schedules. These are a list of non-Indigenous and some Aboriginal items which have been listed with council as having heritage value.

A search of the Singleton LEP has indicated that there is one item listed which is situated within Wambo MOL (**Table 6**).

Table 6 Items listed in the Singleton Local Environmental Plan

Item Name	Address	Heritage Listing
Wambo Homestead	Wambo Mine, Warkworth	Local Government

5.4 Discussion

Research of the various heritage databases has shown that there is one Heritage listed item in the area. The results of the searches are included in **Appendix 6**. A desktop investigation for the location of the Wambo Homestead has shown that it is positioned in such a way that it will not be affected by the proposed works. Subsidence estimates for the Modification Project Area have been provided by Mine Subsidence Engineering Consultants (MSEC) (2014). MSEC (2014) has predicted that there will be no subsidence impact to the Wambo Homestead or any associated structures within the Wambo Homestead Curtilage.

5.5 Conclusion

It is considered that as the Modification Project Area is to the south of North Wambo Creek, it is well removed from the Wambo Homestead which lies upslope and to the north of North Wambo Creek. MSEC (2014) has stated that the proposed Modification will have no impact on the Wambo Homestead or any associated structures within the Wambo Homestead Curtilage.

6.0 Archaeological Field Survey

6.1 Survey Methodology

The field survey for the Modification has been undertaken in accordance with OEH guidelines for survey reporting in the *Code of Practice of Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b) and the *Guide to investigating, assessment and reporting on cultural heritage in NSW* (OEH, 2011) and included the following components:

- documentation of survey coverage;
- documentation of results; and
- documentation of significance of sites/areas to the Aboriginal community.

6.1.1 Survey Aims

The survey was undertaken in order to identify Aboriginal archaeological sites in the Modification Project Area, groundtruth sites previously recorded within the Modification Project Area, determine the visible extent of artefact sites and record new sites. The survey methodology was formulated with these aims in mind and focused on landforms associated with previously identified sites, exposed ground surfaces and targeted the various landforms and vegetated areas within the Modification Project Area.

6.1.2 Field Methods

The survey was conducted on foot (pedestrian) with teams walking transects across the Modification Project Area approximately 5 m apart. The area surveyed was mapped and recorded in accordance with landforms, the Modification Project Area boundaries, predicted subsidence boundaries, changes in survey conditions (such as visibility or ground surface exposure) and/or other relevant considerations. Areas that had previously been undermined by longwall mining were inspected in order to view the impact of potential subsidence on the land surface in the current Modification Project Area.

The mapping of survey units was undertaken on the basis of Differential Global Positioning System (DGPS) recorded data and with reference to aerial and topographic information. The recording of survey units was undertaken using representative digital photographs and field notes which included observations of soils, ground surface exposure and visibility, vegetation cover, rock outcrops, levels of ground surface disturbance and erosion.

The field notes provide a basis for the reporting of survey coverage and calculating survey effectiveness as presented in the survey results section. It is required that any new Aboriginal cultural heritage sites identified are recorded and submitted for registration on the AHIMS database. Such recording involves the documentation of the material traces of past Aboriginal land use, including the spatial extent of sites and any other obvious physical boundaries. Aboriginal cultural heritage sites identified by RAPs may not always involve material traces and boundaries of such sites need to be mapped on the basis of information provided by the RAPs. Sites were recorded by DGPS and mapped accordingly.

6.2 Registered Aboriginal Parties

The Archaeological and Aboriginal cultural heritage field survey was conducted by RPS Senior Archaeologists Gillian Goode and Laraine Nelson both of RPS, accompanied by David Rankin, Environment and Community Coordinator at Wambo in partnership with representatives from Culturally Aware, Lower Hunter Wonnarua Council Inc, Maree T/A Wallangan Cultural Services, Wattaka Wonnarua Cultural Consultancy Services and Wonnarua Cultural Heritage on the Thursday 5 June 2014; and representatives from Carcatchua Pty Ltd, Ungooroo Aboriginal Corporation, Ungooroo Cultural and Community Services and Wonnarua Nation Aboriginal Corporation on Friday 6 June 2014.

6.3 Survey Units

Landform units were described for the area surveyed (**Figure 6**). In particular, exposure and ground surface visibility were reported to ensure comparability of survey results between different areas of the local landscape and to contextualise survey results. Areas with high visibility and exposure generally have extensive land surface disturbance, generating higher quantities of exposed archaeological material that is not *in situ*. Conversely, areas with low visibility and minimal exposure, particularly due to undisturbed native vegetation coverage, are generally more intact landscapes and thus more likely to contain *in situ* archaeological deposits, but such sites may not be as easy to identify.

Three survey units were identified in the Modification Project Area. The landforms units were: an elevated landform and lower slope area 500 m south-west of the confluence of North Wambo Creek and Wollombi Brook; the low lying creek banks of Wambo Creek at the confluence of Wambo Creek and Stony Creek; and the remainder of the Modification Project Area was an extensive floodplain which showed evidence of repeated inundation events (**Figure 6**). Ground surface exposure and ground surface visibility were recorded and analysed for each survey unit. Ground surface visibility was recorded as a percentage range (refer **Table 7**) and sample fractions for the survey units and landforms were also calculated (as shown in **Table 8**).

Table 7 Ground Surface Visibility (GSV) Rating

GSV Rating	Description
0 – 9%	Heavy vegetation with scrub foliage, debris cover and/or dense tree cover. Ground surface not clearly visible.
10 – 29%	Moderate level of vegetation, scrub or tree cover. Small patches of soil surface visible resulting from animal tracks, erosion or blowouts. Patches of ground surface visible.
30 – 49%	Moderate levels of vegetation, scrub and/or tree cover. Moderate sized patches of soil surface visible possibly associated with animal tracks, walking tracks and erosion surfaces. Moderate to small patches across a larger section of the Modification Project Area.
50 – 59%	Moderate to low level of vegetation, tree and/or scrub. Greater amounts of areas of ground surface visible in the form of erosion scalds, recent ploughing, grading or clearing.
60 – 79%	Low levels of vegetation and scrub cover. High incidence of ground surface visible due to recent or past land-use practices such as ploughing, grading and mining. Moderate level of ground surface visibility due to sheet wash erosion, erosion scalds and erosion scours.
80 – 100%	Very low to nonexistent levels of vegetation and scrub cover. High incidence of ground surface visible due to past or recent land use practices, such as ploughing, grading and mining. Extensive erosion such as rill erosion, gilgai, sheet wash, erosion scours and scalds.

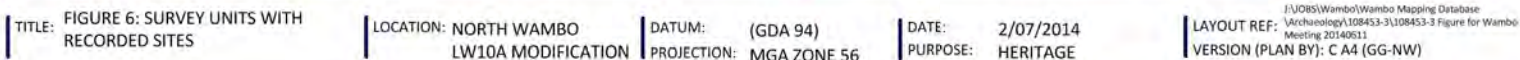


Table 8 Survey Coverage Data within Modification Project Area

Survey Unit	Survey Unit Area (m ²)	Area Surveyed (m ²)	Visibility (%) GSV Rating	Exposure (%)	Effective Coverage Area (m ²)	Effective Coverage (%)	Number of Sites
Wambo Creek Bed and Banks	43860.3778	26316	50	50	10965.0945	25	4
Elevated Landforms on Western Creek Bank of Wollombi Brook and Lower Slope Areas	75149.05884	60119	80	75	45089.4353	60	5
Modified Floodplain	823422.2186	741080	75	60	370539.998	45	0

A summary of the Aboriginal cultural heritage sites identified in the Modification Project Area is shown in **Table 9**. Site co-ordinates were recorded with a hand held DGPS. Site cards were generated for all newly identified sites for registration on the AHIMS database. Site cards are included at **Appendix 5** of this CHIA.

Table 9 Summary of Site Locations Recorded within the Modification Project Area (GDA94/MGA, Zone 56)

Site ID Code	Site Name*	Eastings	Northings	Site Type	Landform
37-5-0195	Wambo Site 40	310765	6390410	Artefact Scatter	Wambo Creek Bank
37-5-0195	Wambo Site 41	310755	6390350	Artefact Scatter	Wambo Creek Bank
37-5-0195	Wambo Site 42	310605	6390280	Artefact Scatter	Wambo Creek Bank
37-2-0644	Wambo Site 336	311712	6391696	Artefact Scatter	Elevated Area Wollombi Brook
37-5-0625	Wambo Site 363	310423	6390528	Artefact Scatter	Wambo Creek Bed
37-5-0647	Wambo Site 371	311482	6391620	Isolated Find	Elevated Area Lower Slope
37-5-0648	Wambo Site 372	311522	6391623	Isolated Find	Elevated Area Lower Slope
37-5-0649	Wambo Site 373	311657	6391547	Isolated Find	Elevated Area Lower Slope
37-5-0650	Wambo Site 374	311619	6391761	Isolated Find	Elevated Area Lower Slope

* Please note the sites are shown on Figure 5 and Figure 6 by Wambo Site Number only.

6.3.1 Wambo Creek and Stony Creek

This survey unit was in the southern part of the Modification Project Area and focused on the lower slopes directly above the terraced area along the southern banks close to the confluence of Wambo Creek and Stony Creek. These flattish spurs sloped gently to the north-west and lay above the floodplain at Wambo Creek. The soil was clayey sand on top of clayey B horizon soils. Vegetation varied across the survey unit. Three sites had been previously recorded in this part of the Modification Project Area, namely AHIMS #37-5-0195 (Wambo Site 40, Wambo Site 41 and Wambo Site 42). To the east and outside of the Modification Project Area were AHIMS #37-5-0195 (Wambo Site 43) and #37-5-0196 (Wambo Site 44).

Artefacts had been previously recorded in 1990 on the elevated lands to the south of Wambo Creek at AHIMS #37-5-0195 (Wambo Site 40, Wambo Site 41 and Wambo Site 42). These sites were groundtruthed during the current survey. Wambo Site 40 was in a highly modified landform that was covered by thick grass and showed evidence of heavy water flow through the area. Visibility was extremely low. No artefacts were found at Wambo Site 40 (Plate 1). Wambo Site 41 was close to a vehicle track that provided access to nearby farm properties. Visibility was moderate, but no artefacts were found (Plate 2). Wambo Site 42 was on an elevated area to the south of a terrace that showed evidence of regular inundation events. Visibility was high and the artefacts were exposed in an eroded area on the surface of the B horizon close to a dirt access track (Plate 3 and Plate 4).

To the east and outside of the Modification Project Area were AHIMS #37-5-0195 (Wambo Site 43) and #37-5-0196 (Wambo Site 44). These sites were groundtruthed as they lay on the same landform as the three sites in the Modification Project Area (Plate 5 and Plate 6). Artefacts were identified on the surface of an erosion scour to the south of the road along an elevated spur. A newly recorded isolated artefact site AHIMS #37-5-0652 (Wambo Site 378) was on the southern side of the main farm dirt access road (Plate 7).

An artefact scatter AHIMS #37-5-0625 (Wambo Site 363) had been previously located in the sandy bed of Stony Creek to the west of the confluence of Stony and Wambo Creeks (Plate 8). Three mudstone flake artefacts had been found lying on the surface of the creek bed and appeared to have been washed from an upstream area. There was no evidence of any artefacts in the soil profiles on either side of Stony Creek and there is evidence of large scale flooding events across this area. It is likely that the artefacts had been washed downstream during high rainfall periods.

The northern creek bank was appreciably lower topographically than the southern bank and the flat lying creek bank extended into a floodplain with dense vegetation and large trees lying along this part of the floodplain. There was evidence of repeated flood events in the sediments along the creek bank. There was also extensive sheet wash and gully erosion in this area.

6.3.2 Floodplain

This survey unit encompassed the expansive floodplain that covered much of the Modification Project Area (Plate 9). The landform is low lying, open, cleared and is subject to repeated flooding events (Plate 10). Previous farming practices cleared the landscape of trees except for a few stands along the adjacent creek bank (Plate 11). These areas show evidence of the extensive flows of water with trees felled by flood waters alongside the creek banks (Plate 1). The ground surface is marshy and very muddy after heavy rain (Plate 12). An ephemeral stream crosses the floodplain and the clayey B horizon is evident in the central part of the floodplain where soils have washed away. Pebble laterite occurs on the surface of the eroded B horizon. This extensive floodplain was marshy and was intersected by a number of ephemeral drainage lines which flow into the high order creeks. The floodplain is vegetated by tussock grasses (Plate 13 and Plate 14).

No Aboriginal cultural heritage sites were identified in this low lying part of the Modification Project Area probably due to the high levels of disturbance associated with inundation events, a power line easement, dirt access road, cattle grazing, fencing, dam construction, extensive land clearing and other previous farming practices, in addition to the marshy characteristics of the low lying ground. It was considered that there was a low potential for subsurface artefacts to occur in this area.

6.3.3 Elevated Landform close to Wollombi Brook

This survey unit was situated in the north eastern section of the Modification Project Area. This elevated land surface is characterised by outcropping, flat lying, jointed sandstone covered with bleached sands forming an elevated platform or low rise on the western bank of Wollombi Brook. This northern portion lies approximately 500 m to the south of North Wambo Creek and around 60 m to the west of the bank of Wollombi Brook.

Four isolated find sites were identified and recorded during the course of the survey: AHIMS #37-5-0647 (Wambo Site 371), a muller or grinding stone (Plate 15 and Plate 16); AHIMS #37-5-0648 (Wambo Site 372), a mudstone core (Plate 17 and Plate 18); AHIMS #37-5-0649 (Wambo Site 373), a silcrete flake (Plate 19 and Plate 20); and AHIMS #37-5-0650 (Wambo Site 374), a mudstone flake (Plate 21 and Plate 22) were identified during the course of the survey. These stone tools identified at these isolated find sites show evidence of usewear.

There are a number of Aboriginal cultural heritage sites that form a Complex Site Area at Wambo; however this complex of sites is located outside of the Modification Project Area on the western bank of Wollombi Brook (Plate 23 to Plate 30). The site is situated in an area of bleached sands (Plate 27 and Plate 28) atop flat lying, jointed sandstone (Plate 23 to Plate 25) and appears to be associated with a number of grinding surfaces (Plate 30) and a grinding groove site with a water hole (Plate 23 and Plate 26).

AHIMS #37-5-0644 Wambo Site 336 forms part of an extensive artefact scatter extending for 300 m in length and 90 m in width; part of this site is located in the Modification Project Area, with the remainder located to the east and outside of the Modification Project Area, and forms part of the Complex Site Area. The artefact scatter comprises a wide range of raw materials and a number of formal stone tools were observed at the site. Artefacts extend from the bleached sand area south east across the top of the grinding surfaces. A muller (grinding stone) was found at AHIMS #37-5-0647 (Wambo Site 371) to the west of AHIMS #37-5-0644 Wambo Site 336.

The Complex Site Area incorporates a number of sites: AHIMS #37-5-0188 Wambo Sites 32 (scar tree), AHIMS #37-5-0638, #37-5-0639 and #37-5-0640 Wambo Sites 330, 331 and 332 (grinding surfaces), AHIMS #37-5-0642 and #37-5-0643 Wambo Sites 334 and 335 (earth mounds), part of AHIMS #37-5-0644 Wambo Site 336 (artefact scatter) and a newly recorded grinding groove site AHIMS #37-5-0651 Wambo Site 377. These sites are on the bank of Wollombi Brook and are located outside of the Modification Project Area, and accordingly WCPL have confirmed that this area will not be subject to potential impacts from the Modification as they lie well outside of the predicted potential subsidence zone.

6.3.4 Summary of Survey Units

The Modification Project Area was characterised by an undulating plain extending from the north of the confluence of Stony Creek and Wambo Creek. The floodplain at the confluence of these two creeks extends along both sides of the creeks. Wambo Creek is a tributary of Wollombi Brook which is situated to the east of the Modification Project Area. The confluence of these two high order waterways is outside of the Modification Project Area but the resultant floodplain, occurring from the meeting of these two creeks, is the dominant landform in the eastern part of the Modification Project Area.

The Modification Project Area was divided into three distinct landform areas: the area comprising Stony Creek and Wambo Creek and their creek banks; the extensive tract of flat lying floodplain that stretches from Wambo Creek in the south to North Wambo Creek in the north; and the lower slopes and elevated landform comprising the sandstone covered by sand deposit in the north east of the Modification Project Area to the west of Wollombi Brook and south of North Wambo Creek.

The Modification Project Area was highly disturbed through previous farming practices, power line emplacement, installation of pipelines, dam and fence construction, vehicle access and livestock grazing. In general, ground surface visibility ranged between 50% and 80%, with moderate to low levels of vegetation coverage and a high incidence of ground surface exposure due to disturbances. Artefact sites were generally located on the slopes and elevated landforms.

6.4 Survey Results

6.4.1 Sites Recorded within the Modification Project Area

There are 9 artefact sites identified in the Modification Project Area, five of which were artefact scatters previously recorded in AHIMS database and four isolated finds which were identified during the field survey.

During the course of the June 2014 field survey, previously recorded sites within the Modification Project Area were groundtruthed and new sites were identified. Aboriginal objects were found at all the sites that were groundtruthed except for Wambo Site 40 and Wambo Site 41 which form part of AHIMS #37-5-0195. While there were some sites which could not be re-identified, most were relocated. Some were found to be more extensive than previously recorded. This would likely be due to the effects of erosion processes which were extensive in areas of high water flow. A number of sites were located on, or very close to, vehicle access ways. The majority of the artefact sites in the area were on the surface of the exposed B horizon and had been affected by sheet wash erosion and trampling by cattle. The area had also been heavily disturbed by previous farming practices. Aboriginal sites were concentrated in the north east and south on elevated landforms.

The site patterning was distinctive in that sites in the Modification Project Area were all located on elevated ground above the floodplain. The majority of the Modification Project Area was in a floodplain. The grassed paddocks had been highly modified with evidence of previous farming activities including land clearing, fencing, ploughing, power poles for electricity supply, dam construction, piping and cattle grazing. There were no Aboriginal sites identified on the floodplain or regularly inundated areas.

The other elevated landform in the Modification Project Area was to the south-west of the confluence of North Wambo Creek and Wollombi Brook. Artefacts had been previously recorded at AHIMS #37-5-0644 (Wambo Site 336) in an elevated area of sandy soils atop flat lying, jointed sandstone to the west of Wollombi Brook. Four isolated finds (Wambo Site 371 [AHIMS #67-5-0647], 372 [AHIMS #37-5-06480], 373 [AHIMS #37-5-0649] and 374 [AHIMS #37-5-0650]) were identified on the gently sloping land to the west of the extensive artefact scatter Wambo Site 336. There were a number of formal tools identified at artefact sites in the Modification Project Area. Visibility was moderate to high in this area. Site cards were generated for these isolated artefacts and submitted to the OEH for inclusion on their database.

Site cards for all sites located within the Modification Project Area are included in **Appendix 5**. Sites identified in the survey area are described in **Table 9**.

6.4.2 Sites Recorded outside of the Modification Project Area

A number of sites outside of the Modification Project Area were visited by the RAPs present for the survey. During inspection of the flat lying sandstone outside and to the east of the Modification Project Area an additional grinding groove was identified. The site was recorded (Wambo Site 377) and a site card was generated for submission to the OEH.

A Complex Site Area was identified during the survey on the bank of Wollombi Brook to the east of the Modification Project Area. Although these sites are located outside of the Modification Project Area, comments were raised by the RAPs which identified the Complex Site Area as an area of interest. AHIMS #37-5-0188 Wambo Site 32 (scar tree), AHIMS #37-5-0638, #37-5-0639 and #37-5-0640 Wambo Sites 330, 331 and 332 (grinding surfaces), AHIMS #37-5-0642 and #37-5-0643 Wambo Sites 334 and 335 (earth mounds), part of AHIMS #37-5-0644 Wambo Site 336 (artefact scatter) and a newly recorded grinding groove site AHIMS #37-5-0651 Wambo Site 377. The Complex Site Area on the creek bank is relatively undisturbed except for previous land clearing, water runoff, fencing works and cattle grazing. Site patterning shows that they are associated with elevated landforms and creek banks in line with the predictive model. None of these sites would be impacted by the proposed Modification as they lie outside of the predicted subsidence zone.

Groundtruthing of nearby sites to the south-east of the Modification Project Area revealed a number of artefacts at the previously recorded artefact scatter sites AHIMS #37-5-0195 (Wambo Site 42 and 43) and #37-5-0196 (Wambo Site 44). One new isolated find site (Wambo Site 378) was recorded and a site card submitted to the OEH for inclusion on their database. All of these sites are located outside of the proposed Modification Project Area.

An inspection of the mature trees in the area was undertaken and a previously recorded modified tree (Wambo Site 32) was inspected in an adjacent area that had been previously undermined by longwall mining with similar predictive subsidence modelling to that of the Modification Project Area. No other modified trees were identified and it was found that the previously undermined trees had not been adversely affected.

All of these sites were located outside of the Modification Project Area, and will not be subject to any potential impacts of the proposed Modification as they lie outside of the predicted subsidence zone (MSEC 2014). These sites have not been considered further in this CHIA.

6.5 Discussion of Survey Results

Review of previous archaeological investigations in the region of the Modification Project Area and Aboriginal site predictive modelling are used to interpret the regional archaeological record. The analysis of this data indicated that both artefact scatters and isolated finds were the most likely site types to be present in and in close the Modification Project Area. Other sites such as grinding groove sites, sandstone grinding surfaces, earth mounds and a scar tree had been located in proximity to the Modification Project Area but none within the Modification Project Area. The majority of these site types were located close to the permanent high order creek lines above the floodplain. Most were identified on the elevated and relatively undisturbed area to the west of Wollombi Brook; in the elevated landforms to the south of Wambo Creek; and on the southern bank of North Wambo Creek. Of these site types only artefact scatters and isolated finds were identified within the Modification Project Area. Artefact scatters and isolated finds were identified within 200 m of watercourses and above the floodplain which is in line with the predictive model. It is considered that the lack of scar trees in the survey area is likely due to the lack of suitable trees and previous land use clearing practices.

A variety of raw material types were identified at AHIMS #37-5-0644 (Wambo Site 336) and at artefact sites close to Wambo Creek AHIMS #37-5-0195 (Wambo Site 42) and Stony Creek AHIMS #37-5-0625 (Wambo Site 363). The dominant raw material found was mudstone and silcrete with minor occurrences of quartz, quartzite, basalt, chert, tuff, sandstone and rhyolite. A diverse range of stone tools were identified including scrapers and a muller. Artefacts identified included a large number of cores, flakes, backed artefacts and blades. These results were in line with the predictive model.

The majority of the Modification Project Area was floodplain and this area was considered unlikely to have intact sub-surface archaeological deposit and no Aboriginal objects were found on the surface of the soils in the floodplain area in line with the predictive model. Four isolated artefacts (Wambo Site 371 [AHIMS #67-5-0647], 372 [AHIMS #37-5-0648], 373 [AHIMS #37-5-0649] and 374 [AHIMS #37-5-0650]) were identified on the gently sloping land to the west of the extensive artefact scatter Wambo Site 336. They were found on slightly elevated lower slopes and were probably associated with the complex site area and extensive artefact scatter AHIMS #37-5-0644 (Wambo Site 336). These isolated artefact sites were exposed on the ground surface and were considered to have no stratigraphic integrity.

7.0 Significance Assessment

In order to develop appropriate heritage management outcomes, it is necessary for the significance of Aboriginal sites or areas of archaeological sensitivity to be assessed. Aboriginal heritage can be significant for cultural and/or scientific reasons. Aboriginal people are the best placed to assess cultural significance and are therefore consulted in the Aboriginal heritage management process. Scientific (archaeological) significance is assessed according to scientific criteria outlined in OEH heritage guidelines.

7.1 Cultural Significance Criteria and Assessment

An assessment of cultural significance incorporates a range of values which may vary for different individual groups and may relate to both the natural and cultural characteristics of places or sites. Cultural significance and Aboriginal cultural views can only be determined by the Aboriginal community using their own knowledge of the sites and their own value system.

As the cultural significance is a criterion that only Aboriginal people can assess, a detailed appraisal of cultural significance for the Modification Project Area has not been included as part of this study. Verbal comment was requested from the RAPs participating in the survey.

Cultural significance of the Modification Project Area was discussed with Aboriginal representatives during the June 2014 survey. The RAPs present stated that the Hunter Valley region is culturally significant to them. They stated that the artefact sites within the Modification Project Area were of cultural significance and related to other sites in the Wambo Area; particularly to the other sites in the Wollombi Brook, North Wambo, Wambo and Stony Creek areas.

The RAPs did not consider the floodplain area to have any specific cultural significance. This area would not have been used for shelter and there was no evidence of any cultural heritage material in the floodplain area. However, they considered the banks of the creeks to have specific cultural significance as these areas would have been suitable for camping and procurement of food and water, which has been considered in Table 3.

The RAPs indicated they were satisfied with the extent of the survey; the groundtruthing of previously identified sites and the methodology used to record newly identified sites. They expressed their wishes that wherever possible that Aboriginal objects remain on the land in the location they were found, but that Wambo should regularly monitor the sites and ensure that there are no impacts to the Aboriginal objects at the sites. Artefacts should only be salvaged if impact to the artefact site cannot be avoided. If artefacts are likely to be impacted by vehicular access or by potential subsidence, only then should they be salvaged and placed in the temporary keeping place for repatriation in the future. Further details are included in the Aboriginal consultation log (**Appendix 1**).

7.2 Archaeological Significance Criteria

Archaeological significance, also referred to as scientific significance, is determined by assessing an Aboriginal heritage site or area according to archaeological criteria. The assessment of archaeological significance is used to develop appropriate heritage management and impact mitigation strategies. Criteria for archaeological significance have been developed in accordance with the principals of the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW 2010b), managed by OEH. The following archaeological significance criteria have been used: rarity, representativeness, integrity, connectedness, complexity and research potential. These terms are defined in **Table 10**.

Table 10 Archaeological Significance Criteria

Criteria	Description
Rarity	This criterion examines the frequency of the identified site types with others previously recorded in the local or regional landscape.
Representativeness	All sites are representative of a site type, however, some sites may be in better condition, or demonstrate more clearly a particular site type. Representativeness is based on the understanding of extant sites in the local or regional landscape and the purpose of this criterion is to ensure a representative sample of sites area conserved for future generations.
Integrity	This refers to site intactness. A site with contextual integrity can provide information relating to chronology, social systems, tool technology, site formation processes, habitation, frequency of use as well as other occupation indicators. Moderate to high levels of disturbance will generally result in low integrity.
Connectedness	Relates to inter-site relationships, that is, whether a site can be linked to an archaeological complex, or where sequence of activities can be discerned. For example, a quarry (stone extractions site), may be linked to an adjacent heat treatment pit and knapping floor, these site thus could be linked as part of a stone tool production sequence.
Complexity	Refers to the contents of the site, such as, the variety and nature of features and/or of artefacts present. For example, rock art sites with many motifs may be ranked highly in terms of complexity, or artefact scatters with a wide variety of raw materials and/or or tool types may be more complex than surrounding sites.
Research Potential	This criterion is used to identify whether a site has the potential to contribute new information which to the interpretation of Aboriginal occupation in the area.

The archaeological significance criteria are usually assessed on two scales: local and regional. In exceptional circumstances however, state significance may also be identified. Archaeological significance criteria is assessed in three levels to which scores are assigned; low (score=1), moderate (score=2) and high (score=3).

A combination of these scores then provides enables an overall significance ranking of the site to be determined.

- Low significance: 6-10.
- Moderate significance: 11-14.
- High significance: 15-18.

7.3 Assessment of Archaeological Significance

The archaeological significance of the identified Aboriginal sites within the Modification Project Area has been assessed and is summarised in **Table 11**.

Table 11 Assessed Levels of Significance for Aboriginal Sites within the Modification Project Area

Site	Significance scale	Rarity	Representativeness	Integrity	Connectedness	Complexity	Research Potential	Overall Score	Overall Significance
Wambo Site 40	Local	1	1	1	1	1	1	6	Low
	Regional	1	1	1	1	1	1	6	Low
Wambo Site 41	Local	1	1	1	1	1	1	6	Low
	Regional	1	1	1	1	1	1	6	Low
Wambo Site 42	Local	1	1	1	1	1	1	6	Low
	Regional	1	1	1	1	1	1	6	Low
Wambo Site 336	Local	2	2	2	3	2	3	14	Moderate
	Regional	1	1	1	1	1	1	6	Low
Wambo Site 363	Local	1	1	1	1	1	1	6	Low
	Regional	1	1	1	1	1	1	6	Low
Wambo Site 371	Local	1	1	1	1	1	1	6	Low
	Regional	1	1	1	1	1	1	6	Low
Wambo Site 372	Local	1	1	1	1	1	1	6	Low
	Regional	1	1	1	1	1	1	6	Low
Wambo Site 373	Local	1	1	1	1	1	1	6	Low
	Regional	1	1	1	1	1	1	6	Low
Wambo Site 374	Local	1	1	1	1	1	1	6	Low
	Regional	1	1	1	1	1	1	6	Low

Wambo Sites 40, 41, 42 (AHIMS #37-5-0195) and Wambo Site 363 (AHIMS #37-5-0625) were all previously recorded as artefact sites in the southern part of the Modification Project Area. They are situated in eroded profiles and have been assessed as having low significance both at a regional and a local level.

Wambo Site 336 forms part of an extensive artefact scatter extending for 300 m in length and 90 m in width, part of which lies within the Modification Project Area and part of which lies to the east and outside of the Modification Project Area. The artefact scatter comprises a wide range of raw materials and a number of formal stone tools were observed at the site. The site is situated in an area of bleached sands atop flat lying, jointed sandstone and appears to be associated with a number of grinding surfaces and a grinding groove site with a water hole – all of which are located on the bank of Wollombi Brook and outside of the Modification Project Area. Artefacts extend from the bleached sand area south east across the top of the grinding surfaces. A muller was found nearby (Wambo Site 371). Wambo Site 336 has been ranked as being of moderate local significance however it is considered to be of low significance at a regional level.

Wambo Sites 371, 372, 373 and 374 (AHIMS #37-5-0647, #37-5-0648, #37-5-0649 and #37-5-0650) were identified during the course of the survey. The artefacts at these isolated find sites are of some significance but as the artefacts are isolates and not *in situ* the sites have been ranked as low on both a regional and a local level.

8.0 Impact Assessment and Mitigation

This section provides an assessment of the proposed Modification in relation to Aboriginal heritage. Conservation of Aboriginal sites and areas of archaeological sensitivity is the preferred heritage outcome. However, other mitigation options have been developed to manage and mitigate any potential impacts from the proposed Modification.

Potential impacts of the Modification on Aboriginal cultural heritage include subsidence effects and direct disturbance. Direct disturbance in the Modification Project Area would be limited to impacts associated with vehicle movements and remediation works, if required. Vehicular movements would be limited to those required for monitoring and general site maintenance activities. If required, the remediation works would be located to minimise impacts on Aboriginal cultural heritage and would be subject to relevant permits being obtained.

8.1 Subsidence Impact

Subsidence estimates for the Modification Project Area (including specific predictions for Aboriginal cultural heritage sites) have been provided by MSEC (2014). Much of the surrounding area has also been previously undermined. The subsidence values by MSEC (2014) are based on the extraction of both the approved and proposed longwalls within the Wambo Seam and the future longwalls in the Arrowfield and Bowfield Seams, however the predictions exclude the predicted movements resulting from the existing workings in the Whybrow Seam. These predictions do however include the effects of these existing workings on the subsidence that develops from the mining in the Wambo, Arrowfield and Bowfield Seams (MSEC 2014:56). The Modification Project Area will be subject to a Subsidence Management Plan or Extraction Plan which will be implemented prior to the proposed works being undertaken.

As such, MSEC (2014) predicted that the additional subsidence effects in the vicinity of known Aboriginal cultural heritage sites within the Modification Project Area would not exceed 1,500 mm (MSEC 2014) and was significantly lower for the majority of Aboriginal cultural heritage sites ranging from 0 mm to 1,500 mm. MSEC (2014:58) considered that the artefact scatters and isolated find sites identified within the Modification Project Area could potentially be affected by cracking of the surface soils as a result of mine subsidence movements, but that it would be unlikely that the stone artefacts at these sites would be impacted by the surface cracking (MSEC 2014). Stone artefacts in this area would therefore only be likely to be affected by vertical subsidence.

MSEC (2014:58) predicted that no significant cracking would occur in the area of Wambo Site 336 in the bleached sands due to the unconsolidated nature of the sand and therefore considered it is unlikely that the bleached sands would experience any adverse impacts as a result of the Modification. Stone artefacts in this area would therefore only be likely to be affected by vertical subsidence.

MSEC (2014:58) stated that the sandstone outcrops and the grinding groove sites were predicted to experience less than 20 mm of vertical subsidence. MSEC considered that it was unlikely that the sandstone outcrops would experience any significant valley related movements and it was therefore unlikely that the sandstone outcrops and associated grinding groove sites would experience any adverse impacts resulting from the proposed Modification (MSEC 2014:58-59).

The Wollemi National Park escarpment cliff lines and steep talus slopes are more than 2 km from the Modification Project Area and are well outside of the predicted subsidence impact area (MSEC 2014:40). It is not expected that the proposed Modification would have an adverse impact on the Wollemi National Park or the associated escarpment (MSEC 2014:40).

Wollombi Brook is situated outside of the Modification Project Area and lies approximately 125 m to the east of the closest end of Longwall 10A. It is considered by MSEC that it is unlikely that Wollombi Brook would experience any adverse impacts as a result of the proposed Modification (MSEC 2014: 35).

MSEC (2014:56-59) calculated the maximum predicted additional subsidence parameters for the archaeological sites in the Modification Project Area for approved mining in the Wambo, Arrowfield and Bowfield Seams (Approved Layout) and compared them to the predicted values for the proposed Modification (Modified Layout of the NWUM). The predicted maximum incremental changes in subsidence resulting from the proposed Modification at any Aboriginal site ranged from 0mm to 1,500mm; in tilt ranged from 0mm/m to 30 mm/m; in hogging curvature ranged from 0.0 km⁻¹ to 2.50 km⁻¹; and in sagging curvature ranged from 0.0 km⁻¹ to 2.90 km⁻¹ (MSEC 2014:58). Further MSEC (2014) predicted that although the maximum subsidence effects in the vicinity of known Aboriginal sites resulting from subsidence relating to the modified layout of the NWUM could vary between 75 mm and 4,500 mm, the actual incremental change between the modified layout of the NWUM and the previously approved layout varied between 0 mm and 1,500 mm (MSEC 2014).

The incremental change in subsidence due to the proposed Modification (in mm) for the bleached sand and the sandstone outcrops is zero (MSEC 2014). The predicted total subsidence based on the approved layout for the bleached sand is 3,700 mm and for the sandstone outcrops is 1,900 mm. The incremental change in tilt due to the proposed Modification for the bleached sand is 5 mm/m and for the sandstone outcrops is zero (MSEC 2014:59).

MSEC (2014) states that the bleached sand area is unlikely to experience any significant surface cracking and that it is therefore unlikely that the bleached sands would experience any adverse impacts as a result of the Modification. The stone artefacts in this area would therefore only be likely to be affected by vertical subsidence. MSEC (2014:58) stated that the sandstone outcrops and the grinding groove sites were predicted to experience less than 20 mm of vertical subsidence. MSEC considered that it was unlikely that the sandstone outcrops would experience any significant valley related movements and it was therefore unlikely that the sandstone outcrops and associated grinding groove sites would experience any adverse impacts resulting from the proposed Modification (MSEC 2014:58-59)..

Table 12 provides the predicted subsidence movements at each Aboriginal cultural heritage site identified within the Modification Project Area (MSEC, 2014). Based upon the subsidence predictions presented in the Subsidence Assessment for the Modification (MSEC, 2014) (extract provided in **Appendix 7**), and as shown in **Table 12** below, it is considered that the whole of surface movement and potential depressions and soil cracking has the propensity for minor to moderate impacts to Aboriginal cultural heritage to occur in some parts of the Modification Project Area. The overall risk from all historic and approved subsidence is therefore assessed as low to moderate. The type of harm is indirect as subsidence has the potential to alter ground surface, but is unlikely to damage the artefacts. The degree of harm as outlined by MSEC (2014) is presented in the table below. Harm to the sites will be prevented by implementing the mitigation measures outlined in Section 8.2.

Table 12 Maximum Predicted Subsidence at the 9 Aboriginal Sites within the Modification Area (MSEC 2014) and Degree of Indirect Harm

Site ID Code	Site Name	Site Type	Predicted total subsidence based on the approved layout (mm)	Incremental change in subsidence due to the proposed modification (mm)	Incremental change in tilt due to the proposed modification (mm/m)	Degree of Indirect Harm assessed by MSEC 2014
37-5-0195*	Wambo Site 40	Artefact Scatter	550	50	2	Low
37-5-0195*	Wambo Site 41	Artefact Scatter	300	0	0	Low
37-5-0195*	Wambo Site 42	Artefact Scatter	75	0	0	Low
37-2-0644	Wambo Site 336	Artefact Scatter	800	100	5	Low
37-5-0625	Wambo Site 363	Artefact Scatter	500	50	1	Low
37-5-0647	Wambo Site 371	Isolated Find	2200	1500	0	Moderate
37-5-0648	Wambo Site 372	Isolated Find	2600	1400	-10	Moderate
37-5-0649	Wambo Site 373	Isolated Find	4500	0	0	Low
37-5-0650	Wambo Site 374	Isolated Find	1800	1300	30	Low

* Note: AHIMS #37-5-0195 incorporates Wambo Sites 40, 41 and 42.

The identified risks to heritage, as well as, proposed conservation and mitigation strategies have been summarised in **Table 13**.

Table 13 Summary of Potential Impacts, Risks to Heritage and Mitigation Options

Impact	Risk to Heritage	Mitigation Option 1	Mitigation Option 2	Mitigation Option 3
Mine Subsidence	Based on the subsidence predictions for surface movement and potential depressions and soil cracking in MSEC (2014) (and provided in Table 12), the risk of substantial impacts to Aboriginal heritage is considered low to moderate.	Subsidence monitoring in relation to Aboriginal Cultural Heritage sites to ensure subsidence movements are as predicted (details to be included in a Subsidence Management Plan).	Move artefacts under an AHIP to a location outside of the impact area, if subsidence monitoring identifies cracking or erosion proximal to a site.	NA
Vehicle movement/ Subsidence Mitigation Works	Direct disturbance/ damage to cultural heritage sites.	Avoid: ensure WCPL Environmental Officer and relevant personnel are given Aboriginal cultural heritage site locations so as to prevent harming sites. Avoid: locate subsidence mitigation works so as to prevent impacts on Aboriginal cultural heritage.	Cordon off site area or prevent vehicular access to site.	Move artefacts under an AHIP to a location outside of the impact area.
Surface Infrastructure	Direct disturbance/ damage to cultural heritage sites.	Locate required surface infrastructure within limit of existing approved disturbance areas. Avoid impact to known Aboriginal cultural heritage sites and ensure WCPL Environmental Officer and relevant personnel are given Aboriginal cultural heritage site locations so as to prevent harming sites.	Cordon off site area to prevent accidental damage.	Move artefacts under an AHIP to a location outside of the impact area.
Vandalism	Direct disturbance/ damage to cultural heritage sites.	Avoid: ensure WCPL Environmental Officer and relevant personnel are given cultural heritage site locations. All relevant WCPL personnel should be made aware of their statutory obligations for heritage under <i>National Parks and Wildlife Act 1974</i> and the <i>Heritage Act 1977</i> .	Cordon off site area and block access route to restrict vehicular access to sites.	Site awareness and sensitivity education programme.

The majority of the Modification Project Area was in a floodplain. The grassed paddocks had been highly modified with evidence of previous farming activities including land clearing, fencing, ploughing, power poles for electricity supply, dam construction, piping and cattle grazing. No artefacts or Aboriginal objects were found in the floodplain. Artefacts were only found on elevated landforms above the floodplain.

Considering the nature and scale of historic and ongoing land disturbance processes in the region, predominantly due to agricultural activities and regular flooding of much of the Modification Project Area, the nature and extent of identified and likely Aboriginal cultural heritage sites within the Modification Project Area, and the nature and scale of impacts associated with the Modification, it is considered that the Modification would not substantially increase cumulative impacts to Aboriginal heritage in the region.

On the basis of subsidence effects viewed in the area, it was determined by the RAPs present, that if subsidence impacts were low, then it was unlikely that artefact sites would suffer impact. However, where subsidence predictions were moderate to high then the artefact sites could be impacted on by downward

movement due to vertical subsidence (whereby the land surface moves downwards as a whole). The RAPs recommended that artefact scatters and isolated finds not be moved unless required. They considered that if any potential impacts to specific sites were likely, then those sites should be salvaged under an appropriate permit. The RAPs also suggested that periodic monitoring of the sites be maintained by WCPL to mitigate against potential site damage from subsidence impacts. If any impact to the Aboriginal objects is considered likely then immediate remediation measures should be implemented. The RAPs' input has been considered for the formulation of the mitigation measures in Section 8.2.

8.2 Mitigation Measures

As the harm is indirect and related to ground surface movement, the mitigation measures outlined in this section respond to a number of scenarios that may occur as a result of ground surface disturbances.

While impacts to archaeological and cultural heritage within the Modification Project Area are predicted to be moderate to low, it is recommended that, if required, WCPL would vary the existing Consent 2222 (s87 and s90 consent to carry out the destruction of an Aboriginal object/place and permit to collect and excavate for the purpose of salvage) under Section 90 of the *National Parks and Wildlife Act, 1974* to allow for subsidence movements and the salvage of registered and unregistered artefact sites (should they be uncovered) in consultation with the relevant Aboriginal parties.

The AHIP would also cover ground surface remediation as MSEC (2014:57) has identified that it is possible that remediation of the ground surface might be required post mining; in this instance an appropriate permit would need to be in place to salvage the artefacts and prevent them from being harmed. If salvage is required under an AHIP or variation to Consent 2222, then artefacts are to be transferred to the temporary keeping place under the existing Care and Control Permit (#3130) in consultation with the relevant Aboriginal parties.

8.3 Principles of Ecologically Sustainable Development

The principles of ecologically sustainable development need to be considered under Section 2A(2) of the *National Parks and Wildlife Act, 1974*. Inter-generational equity is part of these principles, which allows future generations to access the cultural and environmental diversity of the present generation.

Inter-generational equity has been considered as part of the assessment of significance. State significant Aboriginal sites should be considered for blanket protection for future generations, as these sites have been assessed as having highest significance within NSW.

No Aboriginal sites of state significance were identified in this assessment and there were no Aboriginal Places identified within the Modification Project Area or its environs.

8.4 Summary

The nature and scale of historic and ongoing land disturbance processes in the region is extensive, largely as a result of agricultural activities and regular flooding of much of the Modification Project Area. Subsidence estimates for the Modification Project Area (including specific predictions for Aboriginal sites) have been provided by MSEC (2014). The nature and scale of impacts associated with the Modification is considered to be moderate to low. It is also considered that the Modification would not substantially increase cumulative impacts to Aboriginal heritage in the region.

The existing Consent 2222 (s87 and s90 consent to carry out the destruction of an Aboriginal object/place and permit to collect and excavate for the purpose of salvage) covers the vast majority of the Modification Project Area. It is therefore proposed by WCPL that the existing Consent 2222 be varied, to cover the

southern extent and the north eastern tip of the Modification Project Area, in order to allow for subsidence and the salvage (if required) of registered and unregistered sites (should they be uncovered) in the Modification Project Area.

8.5 Subsidence Impact on Wambo Homestead

Wambo Homestead is approximately 1 km to the north of the Modification Project Area and the Curtilage for the Homestead Complex is located more than 300 metres from the closest end of Longwall 10A. (MSEC 2014:56) predict that the incremental vertical subsidence within the Curtilage is within survey tolerance and that the Wambo Homestead Complex is unlikely to be adversely affected by the Modification.

9.0 Conclusions and Recommendations

This CHIA has considered the environmental and archaeological context of Modification Project Area, developed a predictive model and reported on the results of an archaeological survey of the Modification Project Area. The management recommendations have been formulated with consideration to the significance of Aboriginal cultural heritage, as well as potential impacts, and have been prepared in accordance with the relevant legislation.

Subsidence estimates for the Modification Project Area (including specific predictions for Aboriginal sites) have been provided by MSEC (2014). Remediation of the ground surface might be required post mining. Artefacts should be moved under an approved AHIP to a location outside of the impact area if Aboriginal artefact sites are identified to be at risk of harm (e.g. if subsidence monitoring identifies cracking or erosion proximal to a site, or if ground surface remediation works are required). Any salvage works will be undertaken in consultation with the RAPs and any artefacts collected must be transferred to the temporary keeping place under the existing Care and Control Permit (#3130).

Aboriginal Cultural Heritage:

Recommendation 1

It is recommended that the artefacts remain *in situ* unless impact to the sites is unavoidable. It is further recommended that WCPL undertakes subsidence monitoring to ensure that subsidence effects meet the predicted impacts so that Aboriginal objects are not harmed.

Recommendation 2

It is recommended that Aboriginal objects within the existing Consent 2222 boundary be managed in accordance with the terms and conditions of that Consent. Such works must be undertaken in consultation with the RAPs and artefacts collected should be transferred to the temporary keeping place under the existing Care and Control Permit (#3130). It is further recommended that the existing Consent 2222 be varied to include the extent of the Modification Project Area.

Recommendation 3

The location of any Aboriginal cultural heritage sites in the Modification Project Area should be included in the WCPL environmental management framework for the Modification Project Area, so that all relevant staff members are aware that these areas will require management.

In General During the Course of Wambo Works:

Recommendation 4

If any previously unrecorded Aboriginal sites are identified during the course of surface works in the Modification Project Area, the area should be cordoned off and surface works cease until the site has been adequately recorded. Any newly identified sites should be managed in accordance with management measures for similar site/artefact types previously identified within the Modification Project Area or across the wider Wambo area, in consultation with the RAPs.

Recommendation 5

In the event that skeletal remains are uncovered, work must cease immediately in that area and WCPL will need to contact the NSW Police Coroner to determine if the material is of Aboriginal origin. If the remains are determined to be Aboriginal, WCPL must then contact the OEH Enviroline 131 555 and the RAPs in order to determine an action plan for the management of the skeletal remains prior to works re-commencing.

Indigenous and non-Indigenous Cultural Heritage:

Recommendation 6

All relevant WCPL staff should be made aware of their statutory obligations for heritage under *National Parks and Wildlife Act 1974* and the *Heritage Act 1977*, which may be implemented as a heritage induction. If during the course of surface site works significant non-Indigenous cultural heritage material is uncovered, work should cease in that area immediately. OEH should be notified and surface works only recommenced when an appropriate and approved management strategy has been instigated.

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11.0 Plates



Plate 1 Wambo Site 40 view facing east along Wambo Creek



Plate 2 Wambo Site 41 view facing east



Plate 3 Wambo Site 42 facing west



Plate 4 Wambo Site 42 facing north



Plate 5 Wambo Site 43 & 44 view facing south-east



Plate 6 Wambo Site 43 & 44 view facing east



Plate 7 Wambo Site 378 view facing south-west



Plate 8 Wambo Site 363 view east along Stony Creek



Plate 9 Floodplain centre view to south



Plate 10 Floodplain to north east



Plate 11 Floodplain to north-west



Plate 12 Floodplain centre view to north-east



Plate 13 Floodplain in south view to south-west



Plate 14 Floodplain view facing north-east



Plate 15 Wambo Site 371 facing east to Wollombi Brook



Plate 16 Wambo Site 371 showing muller



Plate 17 Wambo Site 372 facing east



Plate 18 Wambo Sites 372 mudstone core



Plate 19 Wambo Site 373 view facing east to Wollombi Brook



Plate 20 Wambo Site 373 silcrete flake



Plate 21 Wambo Site 374 view facing north



Plate 22 Wambo Site 374 red/yellow mudstone flake



Plate 23 Wambo Site 377 view facing south (outside of Modification Project Area)



Plate 24 Wambo Site 377 view facing south-west (outside of Modification Project Area)



Plate 25 Wambo Site 377 view facing north (outside of Modification Project Area)



Plate 26 Wambo Site 377 Grinding Grooves (outside of Modification Project Area)



Plate 27 Wambo Site 336 view facing south



Plate 28 Wambo Site 337 view facing north (outside of Modification Project Area)



Plate 29 Wambo Site 336 tree bolus with artefacts (outside of Modification Project Area)



Plate 30 Wambo Complex Site shallow sandstone grinding surface (outside of Modification Project Area)

Appendix I

Aboriginal Consultation Log

Date	Consultation Description	Method of Contact	Outcomes/Purpose
20/05/2014	Call made to David French.	Phone	Call made to obtain David French's address. No answer. A message was left on voicemail requesting that address contact details be provided.
21/05/2014	Call made to Barry French.	Phone	Call made to request David French's forwarding address. Barry French provided Gillian Goode with David French's mobile contact number.
22/05/2014	Call made to David French.	Phone	Call made to request David French's mailing address. No answer. A message was left on voicemail.
22/05/2014	Call made to Barry French.	Phone	Call made to Barry French who agreed that David French's mail could be sent care of Barry's mailing address.
22/05/2014	A copy of the Proposed Methodology and an invite to the Information Session was sent to: Aboriginal Native Title Consultants, AGA Services, Bawurra Consultants, Breeza Plains Cultural Heritage Consultants, Bullem Bullem Heritage Consultants, Buudang, Carcatchua Pty Ltd, Carrawonga Consultants, Culturally Aware, Deslee Talbott Consultants, DFTV, DRM Cultural Management, EMT Cultural & Heritage, Ronald Fenwick, Galamaay Consultant, Gidawaa Walang Cultural Heritage Consultancy, Giwir Consultants, Jill Green, HECMO Consultants, Heilamon Cultural Consultants, HTO Environmental Management Services, Hunter Valley Aboriginal Corporation, Hunter Valley Cultural Consultants, Hunter Valley Cultural Surveying, Hunter Valley Natural & Cultural Resource Management, I & E Aboriginal Culture and Heritage, Janbant Mugrebea, Kauwul (Wonn1), Kawul Cultural Services, Kayaway Eco Cultural & Heritage Services, KL.KG Saunders Trading Services, L.J. Cultural Management, Lower Hunter Aboriginal Incorporated, Lower Hunter Wonnarua Council Incorporated (also known as Lower Hunter Wonnarua Cultural Services), Maree /TA Wallangan Cultural Services, Jeffrey Matthews, Roger Noel Matthews, Mingga Consultants, Moreeites, Muswellbrook Cultural Consultants, Myland Cultural Heritage Group, Ngarramang-Kuri Aboriginal Culture & Heritage Group, Roslyn Sampson, Smith Dhagaans Cultural Group, Scott Smith, T & G Culture Consultants, Lorraine Towney, Ungooroo Aboriginal Corporation, Ungooroo Cultural & Community Services, Upper Hunter Heritage Consultants, Upper Hunter Wonnarua Council Incorporated, Valley Culture, Waabi Gabinya Cultural Consultancy, Wanaruah Custodians Aboriginal Corporation, Wanaruah Local Aboriginal Land Council, Warragil Cultural Services, Wattaka Wonnarua Cultural Consultancy Services, Widescope Indigenous Group Pty Ltd, Wonnarua Culture Heritage, Wonnarua Nation Aboriginal Corporation, Wonnarua Traditional Owners, Wurrumay Consultants, Yarrawalk (a division of Tocomwall Pty Ltd) and Yinarr Cultural Services.	Mail	-

Date	Consultation Description	Method of Contact	Outcomes/Purpose
23/05/2014	Call made to David French.	Phone	Advised David French that the Proposed Methodology for the Modification been mailed to him care of Barry French. David French supplied his mailing address. David French requested that the information be mailed to him.
23/05/2014	Proposed Methodology was mailed to David French	Mail	-
23/05/2014	Call made to Wattaka Wonnarua Cultural Consultancy Services - Des Hickey requesting Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Land line phone number went straight to message bank. Rang mobile and spoke with Des Hickey and advised we required updated copies of Certificate's of Currency to stay on the field roster. Mr Hickey requested I email him with RPS fax number so he could fax through documents. Email sent at 1.40pm.
23/05/2014	Call made to Valley Culture - Larry Van Vliet requesting Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Rang land line phone number - phone switched to fax machine, no capacity to leave voice mail message. Rang mobile - phone disconnected. Rang second mobile - lady who answered did not have a contact phone number for Valley Culture or Larry Van Vliet.
23/05/2014	Call made to Aboriginal Native Title Consultants - Margaret Matthews requesting Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Rang mobile phone number and spoke with Margaret Matthews. Advised that we required updated copies of Certificate's of Currency to stay on the field roster. Mrs Matthews requested we mail request and further information on the Wambo upcoming works. RPS confirmed that the address details on file were correct and advised that the Proposed Methodology for the Modification was in the mail.
23/05/2014	Call made to Bullen Bullen - Lloyd Matthews to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Rang land line phone number - phone rang out, no message bank service. Rang mobile number - phone switched off or out of service area.
23/05/2014	Phone call made to Ungooroo Aboriginal Corporation - Tasha Layer to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Rang land line phone number - spoke with Tasha Layer and requested copies of Certificate's of Currency for Worker's Compensation and Public Liability. Ms Layer requested email address, advised to send through to Gillian Goode's email address.
23/05/2014	Phone call made to Hunter Valley Cultural Surveying - Luke Hickey to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Land line phone number invalid. Rang mobile and spoke with Luke Hickey and advised we required updated copies of Certificate's of Currency to stay on the field roster. Mr Hickey requested I email him with RPS fax number so he could fax through documents. Email sent at 2.11pm, copying in Gillian Goode.

Date	Consultation Description	Method of Contact	Outcomes/Purpose
23/05/2014	Call made to HTO Environmental Management Services - Paulette Ryan to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Land line phone number invalid. Mobile phone number disconnected.
23/05/2014	Call made to Kayaway Eco Cultural & Heritage Services - Mark Hickey to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Mobile telephone number disconnected. Second mobile number listed not accepting incoming phone calls.
23/05/2014	Call made to Wonnarua Nation Aboriginal Corporation - Laurie Perry to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Rang office number - receptionist answered and advised Mr Perry not in the office - suggested ringing his mobile number. Rang mobile and left voice mail message for return phone call to myself or Gillian Goode. Mr Perry returned phone call and requested he be emailed and he will reply with copies of documents requested.
23/05/2014	Call made to Maree T/As Wallangan Cultural Services - Maree Waugh to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Rang mobile phone number - service is temporarily unavailable. Received return phone call from Maree Waugh. Advised we required Certificates of Currency for Public Liability and Worker's Compensation. Requested email be sent to her so she can reply with requested documents. Email sent at 2.30pm.
23/05/2014	Call made to KL.KG Saunders Trading Services - Krystal Saunders to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Rang mobile phone number - left voice mail message for return phone call.
23/05/2014	Call to Ungooroo Cultural and Community Services - Rhonda Ward to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Mrs Ward requested she be emailed and will reply with copies of documents requested.
23/05/2014	Email to Ungooroo Cultural and Community Services providing RPS contact details.	Email	-
26/05/2014	Proposed Methodology Letter to Wonnarua Traditional Owners (Des Hickey) returned by Australia Post marked Return to Sender.	Mail	RPS confirmed that Des Hickey had received the methodology information via Wattaka Wonnarua Cultural Consultancy Services
26/05/2014	Proposed Methodology Letter to Kawul Cultural Services (Vicky Slater) returned by Australia Post marked Return to Sender.	Mail	Jeremy Hill emailed a copy of the Proposed Methodology to Kawul Cultural Services
26/05/2014	Proposed Methodology Letter to Wurrumay Consultants (Kerrie Slater) returned by Australia Post marked Return to Sender.	Mail	Jeremy Hill emailed a copy of the Proposed Methodology to Wurrumay Consultants
27/05/2014	Certificates of Currency received from Ungooroo Cultural and Community Services.	Fax	-
27/05/2014	Call made to Wattaka Wonnarua Cultural Consultancy Services to request Certificates of Currency and availability to work.	Phone	RPS left message on both numbers.

Date	Consultation Description	Method of Contact	Outcomes/Purpose
27/05/2014	Call made to Aboriginal Native Title Consultants to request Certificates of Currency and availability to work.	Phone	Jeremy Hill spoke to John. He will get the insurances to RPS as soon as possible. Aboriginal Native Title Consultants are free on the 5 or 6 June 2014.
27/05/2014	Call made to Bullen Bullen Heritage Consultants to request Certificates of Currency and availability to work	Phone	Jeremy Hill left message on mobile. Left message with his wife Gill. Jeremy asked to have the insurances as soon as possible.
27/05/2014	Call made to Wonnarua Culture Heritage to request Certificates of Currency and availability to work.	Phone	Jeremy Hill called Gordon. He can have his insurances by tomorrow morning.
27/05/2014	Call made to HTO Environmental Management Services - Paulette Ryan to request Certificates of Currency for Worker's Compensation and Public Liability.	Phone	Jeremy Hill called Paulette. She can be available for 5 or 6 and can send current insurances by this afternoon.
27/05/2014	Call made to Kayaway Eco Cultural & Heritage Services - Mark Hickey to request Certificates of Currency and availability to work.	Phone	Number had been disconnected.
27/05/2014	Call made to Wonnarua Nation Aboriginal Corporation to Laurie Perry to request Certificates of Currency and availability to work.	Phone	Left message on mobile and tried work number. Left messages on both. Left message on an alternate number.
27/05/2014	Call made to KL.KG Saunders Trading Services regarding insurances and availability to work.	Phone	Left message on mobile.
27/05/2014	Email to HTO Environmental Management Services.	Email	-
27/05/2014	Email to Kayaway requesting Certificate of Currency.	Email	-
27/05/2014	Insurances received from Ungooroo Aboriginal Corporation.	Email	-
28/05/2014	Call made to Aboriginal Native Title Consultants to request Certificates of Currency and availability to work.	Phone	Jeremy Hill spoke to John. He will get the insurances to RPS ASAP. Aboriginal Native Title Consultants are free on the 5 or 6 June 2014; Aboriginal Native Title Consultants did not provide insurances.
28/05/2014	Call made to KL.KG Saunders Trading Services regarding insurances and availability to work.	Phone	Left message on mobile.
28/05/2014	Call made to Wonnarua Nation Aboriginal Corporation - Laurie Perry to request Certificates of Currency and availability to work.	Phone	Laurie said that he was waiting on his Workers Compensation but could send through his Public Liability.
27/05/2014	Call made to HTO Environmental Management Services - Paulette Ryan to request Certificates of Currency and availability to work.	Phone	Paulette Ryan said that she could send through her insurances today. Her computer had crashed and apologised for the delay.

Date	Consultation Description	Method of Contact	Outcomes/Purpose
28/05/2014	Calls made to Culturally Aware regarding availability to work.	Phone	Mobile 1 - was engaged (tried x3 times). Mobile 2 - was switched off (tried x3 times). Landline - left message (tried x2 times).
28/05/2014 & 4/6/2014	Call made to Yarrawalk about availability to work.	Phone	Jeremy Hill spoke to Scott Franks and then to Tessa Boer-Mah regarding a number of queries, some of which were not specifically related to the Modification. WCPL provided a formal letter with clarifications, which was issued to Scott on the 4/6/2014.
28/05/2014	Calls Made to Wattaka Wonnarua Cultural Consultant Services regarding insurances and availability to work.	Phone	Jeremy Hill spoke to Des Hickey and asked if he could send through his current insurances. Des asked to have the request in an email. Jeremy Hill sent an email with the survey details. Des sent through his current insurances.
28/05/2014	Call made to Lower Hunter Wonnarua Cultural Services regarding availability to work.	Phone	Jeremy Hill asked if his group could be onsite for the 5 June 2014.
28/05/2014	Call made to Aboriginal Native Title Consultants about insurances and availability to work.	Phone	Jeremy Hill spoke to John. Margaret will send insurances today.
28/05/2014	Call Bullen Bullen regarding insurances and availability to work.	Phone	Jeremy Hill rang to enquire about insurances. Left message on mobile and home phone rang out.
28/05/2014	Call made to Ungooroo Cultural and Community Services - Regarding insurances and availability to work.	Phone	Jeremy Hill asked if her group could be onsite for the 5 June 2014. They can be onsite.
28/05/2014	Call made to Wallangan Cultural Services - Regarding insurances and availability to work.	Phone	Jeremy Hill rang to ask if her group could be onsite 5 June 2014. Mobile was out of range and sent an email.
28/05/2014	Call made to Wonnaruah Culture Heritage - Regarding insurances and availability to work.	Phone	Jeremy Hill rang to enquire about insurances.
28/05/2014	Call made to Moreeites regarding Certificate of Currencies and availability to work on the 5 or 6 June 2014.	Phone	Left message.
28/05/2014	Call made to Waabi Gabinya Cultural Consultancies - Regarding Certificate of Currencies and availability to work on the 5 or 6 June 2014.	Phone	Left message.
28/05/2014	Received insurances from Wattaka Wonnarua Cultural Consultancy Services.	Email	-
28/05/2014	Received insurances from Wonnarua Culture Heritage.	Fax	-
28/05/2014	Call made to Kawul Cultural Services regarding possible substitute for the upcoming Wambo works.	Phone	Vicky Slater said that she could be available to survey on the 5 or 6 June 2014, providing that another RAP could not attend.

Date	Consultation Description	Method of Contact	Outcomes/Purpose
28/05/2014	Email from Culturally Aware.	Email	Tracey Skene sent RPS an email to request information about the upcoming works.
29/05/2014	Call made to Culturally Aware regarding upcoming field works.	Phone	In response to Tracey's email, RPS called her new mobile number and left a message.
29/05/2014	Received insurances from Wonnarua Nation Aboriginal Corporation.	Email	Wonnarua Nation Aboriginal Corporation.
30/05/2014	Call to Ungooroo Aboriginal Corporation regarding upcoming works.	Phone	Jeremy Hill asked if the Ungooroo Aboriginal Corporation could have a sites officer for the 6 June 2014. They will be present on site.
30/05/2014	Call to Cacatua Culture Consultants regarding upcoming works.	Phone	Jeremy Hill asked if Cacatua Culture Consultants could have a sites officer for the 6 of June. They will be present on site.
30/05/2014	Call to Kawul regarding upcoming works.	Phone	Jeremy Hill asked if Kawul could have a sites officer for the 6 of June. They will be present on site.
30/05/2014	RPS sent letters of invitation to the following RAPs for survey work as they were the next in line according to the established roster: Culturally Aware, Wattaka Wonnarua Cultural Consultancy Services, Lower Hunter Aboriginal Incorporated also known as Lower Hunter Wonnarua Cultural Services, Wonnarua Culture Heritage, Ungooroo Cultural & Community Services, Wonnarua Nation Aboriginal Corporation, Warragil Cultural Services, Kawul Cultural Services, Cacatua Culture Consultants, Ungooroo Aboriginal Corporation.	Mail/ Email	-
1/06/2014	Response received from Maree/ TA Wallangan Cultural Services for invitation to site.	Email	Maree Waugh is the nominated sites officer for Wallangan Cultural Services.
1/06/2014	Response received from Culturally Aware for invitation to site.	Email	Tracey Skene is the nominated sites officer for Culturally Aware.
2/06/2014	Wonnarua Culture Heritage rang RPS asking if he needed to send his insurances through again.	Phone	Jeremy Hill informed Wonnarua Culture Heritage that it was not necessary.
2/06/2014	Response received from Ungooroo Aboriginal Corporation.	Email	Allen Pagett is the nominated sites officer for Ungooroo Aboriginal Corporation.
2/06/2014	JLC Cultural Management (Jenny Chambers) contacted RPS.	Email	Jenny Chambers emailed RPS to register an interest in being involved in the consultation process for the Modification.
4/06/2014	Troy Favell from WCPL emailed JLC Cultural Services.	Email	WCPL emailed Jenny Chambers to advise that JLC Cultural Services could be involved in the consultation process for the Modification as an Interested Stakeholder.

Date	Consultation Description	Method of Contact	Outcomes/Purpose
5/06/2014	RPS sent an email to HTO Environmental Management Services to clarify the status of the field work representatives.	Email	-
5/06/2014	Field Survey	In Person	RAPs Present were: Culturally Aware, Lower Hunter Wonnarua Council Inc, Maree T/A Wallangan Cultural Services, Wattaka Wonnarua Cultural Consultancy Services and Wonnarua Cultural Heritage.
5/06/2014	RPS contacted Cacatua Culture Consultants.	Phone	Jeremy Hill rang George Sampson and asked for his new ABN Number. He was driving and would get Donna to call back.
5/06/2014	Cacatua Culture Consultants contacted RPS.	Phone	Donna Sampson Rang back and gave Jeremy Hill Cacatua Culture Consultants new ABN number. She stated that this was not a new number.
5/06/2014	Jeremy Hill called Cacatua Culture Consultants.	Phone	Jeremy Hill phoned Cacatua Culture Consultants and spoke to Donna asking to email the statement so that they could participate in the works. Jeremy Hill informed them that they needed it this afternoon. Donna said that she would send the statement this afternoon, however due to the tight time frame; she suggested that George not attend the works on Friday.
5/06/2014	Jeremy Hill called Carcatchua Pty Ltd.	Phone	Jeremy Hill informed George that he could still attend on the provision that he supply a statement with his ABN when he signed in. George will be in attendance.
6/06/2014	JLC Cultural Management (Jenny Chambers) contacted Troy Favell from WCPL.	Email	Jenny emailed WCPL to confirm that she wished to be involved in the consultation process for the Modification as an Interested Stakeholder. Jenny Chambers' details were added to the Wambo Coal Roster and the mailing list.
6/06/2014	Field Survey.	In Person	RAPs Present were: Carcatchua Pty Ltd, Ungooroo Aboriginal Corporation, Ungooroo Cultural and Community Services and Wonnarua Nation Aboriginal Corporation.
11/06/2014	Information Session.	In Person	RAPs present were: Ronald Fenwick.
12/06/2014	Suzie Worth called RPS.	Phone	No RPS personnel were in the office to take the call.

Date	Consultation Description	Method of Contact	Outcomes/Purpose
13/06/2014	Return call made to Suzie Worth.	Phone	Suzie wanted to know the closing date of the Proposed Methodology so that the Wanaruah Local Aboriginal Land Council could send through their comments. Jeremy Hill informed her that the date was 20/06/2014. Suzie also wanted to know about the Information Session and Jeremy informed her that materials from the Information Session would be provided to all RAPs.
19/06/2014	Copy of Power Point Presentation from Information Session 11 June 2014 sent to: Aboriginal Native Title Consultants, AGA Services, Bawurra Consultants, Breeza Plains Cultural Heritage Consultants, Bullem Bullem Heritage Consultants, Buudang, Carcatchua Pty Ltd, Carrawonga Consultants, Culturally Aware, Deslee Talbott Consultants, DFTV, DRM Cultural Management, EMT Cultural & Heritage, Ronald Fenwick, Galamaay Consultant, Gidawaa Walang Cultural Heritage Consultancy, Giwiir Consultants, Jill Green, HECMO Consultants, Heilamon Cultural Consultants, HTO Environmental Management Services, Hunter Valley Aboriginal Corporation, Hunter Valley Cultural Consultants, Hunter Valley Cultural Surveying, Hunter Valley Natural & Cultural Resource Management, I & E Aboriginal Culture and Heritage, Janbant Mugrebea, JLC Cultural Services, Kauwul (Wonn1), Kauwul Cultural Services, Kayaway Eco Cultural & Heritage Services, KL.KG Saunders Trading Services, L.J. Cultural Management, Lower Hunter Aboriginal Incorporated, Lower Hunter Wonnarua Council Incorporated (also known as Lower Hunter Wonnarua Cultural Services), Maree /TA Wallangan Cultural Services, Jeffrey Matthews, Mingga Consultants, Moreeites, Muswellbrook Cultural Consultants, Myland Cultural Heritage Group, Ngarramang-Kuri Aboriginal Culture & Heritage Group, Roger Noel Matthews, Roslyn Sampson, Smith Dhagaans Cultural Group, Scott Smith, T & G Culture Consultants, Lorraine Towney, Ungooroo Aboriginal Corporation, Ungooroo Cultural & Community Services, Upper Hunter Heritage Consultants, Upper Hunter Wonnarua Council Incorporated, Valley Culture, Waabi Gabinya Cultural Consultancy, Wanaruah Custodians Aboriginal Corporation, Wanaruah Local Aboriginal Land Council, Warragil Cultural Services, Wattaka Wonnarua Cultural Consultancy Services, Widescope Indigenous Group Pty Ltd, Wonnarua Culture Heritage, Wonnarua Nation Aboriginal Corporation, Wonnarua Traditional Owners, Wurrumay Consultants, Yarrowalk (a division of Tocomwall Pty Ltd) and Yinarr Cultural Services.	Mail	-
4/07/2014	Copy of Methodology sent to JLC Cultural Management	Mail	-

Date	Consultation Description	Method of Contact	Outcomes/Purpose
4/07/2014	Copy of Draft Report sent to: Aboriginal Native Title Consultants, AGA Services, Bawurra Consultants, Breeza Plains Cultural Heritage Consultants, Bullem Bullem Heritage Consultants, Buudang, Carcatchua Pty Ltd, Carrawonga Consultants, Culturally Aware, Deslee Talbott Consultants, DFTV, DRM Cultural Management, EMT Cultural & Heritage, Ronald Fenwick, Galamaay Consultant, Gidawaa Walang Cultural Heritage Consultancy, Giwir Consultants, Jill Green, HECMO Consultants, Heilamon Cultural Consultants, HTO Environmental Management Services, Hunter Valley Aboriginal Corporation, Hunter Valley Cultural Consultants, Hunter Valley Cultural Surveying, Hunter Valley Natural & Cultural Resource Management, I & E Aboriginal Culture and Heritage, Janbant Mugrebea, JLC Cultural Services, Kauwul (Wonn1), Kawul Cultural Services, Kayaway Eco Cultural & Heritage Services, KL.KG Saunders Trading Services, L.J. Cultural Management, Lower Hunter Aboriginal Incorporated, Lower Hunter Wonnarua Council Incorporated (also known as Lower Hunter Wonnarua Cultural Services), Maree /TA Wallangan Cultural Services, Jeffrey Matthews, JLC Cultural Management, Mingga Consultants, Moreeites, Muswellbrook Cultural Consultants, Myland Cultural Heritage Group, Ngarramang-Kuri Aboriginal Culture & Heritage Group, Roger Noel Matthews, Roslyn Sampson, Smith Dhagaans Cultural Group, Scott Smith, T & G Culture Consultants, Lorraine Towney, Ungooroo Aboriginal Corporation, Ungooroo Cultural & Community Services, Upper Hunter Heritage Consultants, Upper Hunter Wonnarua Council Incorporated, Valley Culture, Waabi Gabinya Cultural Consultancy, Wanaruah Custodians Aboriginal Corporation, Wanaruah Local Aboriginal Land Council, Warragil Cultural Services, Wattaka Wonnarua Cultural Consultancy Services, Widescope Indigenous Group Pty Ltd, Wonnarua Culture Heritage, Wonnarua Nation Aboriginal Corporation, Wonnarua Traditional Owners, Wurrumay Consultants, Yarrawalk (a division of Tocomwall Pty Ltd) and Yinarr Cultural Services.	Mail	-

Date	Consultation Description	Method of Contact	Outcomes/Purpose
29/07/2014	Reminder calls and emails of due date for comments on Draft Report made to: Aboriginal Native Title Consultants, AGA Services, Bawurra Consultants, Breeza Plains Cultural Heritage Consultants, Bullem Bullem Heritage Consultants, Buudang, Carcatchua Pty Ltd, Carrawonga Consultants, Culturally Aware, Deslee Talbott Consultants, DFTV, DRM Cultural Management, EMT Cultural & Heritage, Ronald Fenwick, Galamaay Consultant, Gidawaa Walang Cultural Heritage Consultancy, Giwiir Consultants, Jill Green, HECMO Consultants, Heilamon Cultural Consultants, HTO Environmental Management Services, Hunter Valley Aboriginal Corporation, Hunter Valley Cultural Consultants, Hunter Valley Cultural Surveying, Hunter Valley Natural & Cultural Resource Management, I & E Aboriginal Culture and Heritage, Janbant Mugrebea, JLC Cultural Services, Kauwul (Wonn1), Kawul Cultural Services, Kayaway Eco Cultural & Heritage Services, KL.KG Saunders Trading Services, L.J. Cultural Management, Lower Hunter Aboriginal Incorporated, Lower Hunter Wonnarua Council Incorporated (also known as Lower Hunter Wonnarua Cultural Services), Maree /TA Wallangan Cultural Services, Jeffrey Matthews, JLC Cultural Management, Mingga Consultants, Moreeites, Muswellbrook Cultural Consultants, Myland Cultural Heritage Group, Ngarramang-Kuri Aboriginal Culture & Heritage Group, Roger Noel Matthews, Roslyn Sampson, Smith Dhagaans Cultural Group, Scott Smith, T & G Culture Consultants, Lorraine Towney, Ungooroo Aboriginal Corporation, Ungooroo Cultural & Community Services, Upper Hunter Heritage Consultants, Upper Hunter Wonnarua Council Incorporated, Valley Culture, Waabi Gabinya Cultural Consultancy, Wanaruah Custodians Aboriginal Corporation, Wanaruah Local Aboriginal Land Council, Warragil Cultural Services, Wattaka Wonnarua Cultural Consultancy Services, Widescope Indigenous Group Pty Ltd, Wonnarua Culture Heritage, Wonnarua Nation Aboriginal Corporation, Wonnarua Traditional Owners, Wurrumay Consultants, Yarrawalk (a division of Tocomwall Pty Ltd) and Yinarr Cultural Services.	Phone & Email	-
29/07/2014	Verbal response received from Aboriginal Native Title Consultants. Margaret Matthews stated that she was unable to comment as she was not present for the field survey.	Phone	-
29/07/2014	Verbal response received from AGA Services. Adam Sampson informed RPS that he would look at the draft report and get back to RPS if he had any comments	Phone	-
29/07/2014	Verbal response received from Bawurra Consultants. RPS spoke with Kevin Sampson and he did not have any comments	Phone	-
29/07/2014	RPS called Breeza Plains Cultural Heritage Consultants. No answer to phone call, no message bank, no backup phone number.	Phone	-
29/07/2014	RPS called Bullem Bullem Heritage Consultants, left message on first call phone line busy on the second call.	Phone	-

Date	Consultation Description	Method of Contact	Outcomes/Purpose
29/07/2014	Verbal response received from Buudang. Debbie Fowley advised that she will speak with her husband and they will get back to RPS with comments.	Phone	-
29/07/2014	Verbal response received from Carcatchua Pty Ltd. RPS phoned George Sampson and left a message. George called back to say that he and Donna Sampson were happy with the report and that Donna had also discussed it with Adam Samson of AGA and that Adam was also happy with the report.	Phone	-
29/07/2014	RPS called Carrawonga Consultants, phone disconnected, not accepting incoming calls.	Phone	-
29/07/2014	RPS called Deslee Talbot Consultants, left a voice message on phone.	Phone	-
29/07/2014	RPS called Derrick Vale Senior left a voice message on phone.	Phone	-
29/07/2014	RPS called DRM Cultural Management left a voice message on phone.	Phone	-
29/07/2014	Verbal response received from EMT Cultural and Heritage. RPS spoke with Mervyn Lesley and he is very happy with the report.	Phone	-
29/07/2014	RPS called Galamaay Consultant, phone service unavailable.	Phone	-
29/07/2014	Verbal response received from Gidawaa Walang Cultural Heritage Consultancy. Ann Hickey told RPS she is happy with the report.	Phone	-
29/07/2014	Verbal response received from Giwiir Consultants. No answer on the first call, however Rodney phoned RPS back to say he is happy with the report.	Phone	-
29/07/2014	Verbal response received from HEMCO Consultants. RPS spoke with Kerren Boyd and they are happy with the report.	Phone	-
29/07/2014	RPS called HTO Environment Management Services, tried two phone numbers, both disconnected.	Phone	-
29/07/2014	Verbal response received from Hunter Valley Aboriginal Corporation. RPS spoke with Rhonda Griffiths and she said the Hunter Valley Aboriginal Corporation would support the comments made by the Wanaruah Local Aboriginal Land Council. Hunter Valley Aboriginal Corporation were generally in support of the report.	Phone	-
29/07/2014	Verbal response received from Hunter Valley Consultants. RPS spoke to Christine Archbold and she said she is happy with the report.	Phone	-
29/07/2014	RPS called Hunter Valley Natural and Cultural Resources Management, left messages on two different numbers.	Phone	-
29/07/2014	RPS called I & E Aboriginal Culture and Heritage, left a voice message on phone.	Phone	-
29/07/2014	Verbal response received from Janbant Mugrebea. RPS spoke with Les Atkinson, and he was unsure if he had anything to do with the Modification, but would check and get back to RPS.	Phone	-

Date	Consultation Description	Method of Contact	Outcomes/Purpose
29/07/2014	Verbal response received from Kawul Cultural Services. RPS spoke with Vicky Slater and she will get back to RPS with her comments.	Phone	-
29/07/2014	RPS called Kayaway Eco Cultural and Heritage Services, phone disconnected.	Phone	-
29/07/2014	RPS called L. J. Cultural Management, left a voice message on phone.	Phone	-
29/07/2014	RPS called Lower Hunter Aboriginal Incorporated, left a voice message on phone.	Phone	-
29/07/2014	Verbal response received from Lower Hunter Wannarua Council Inc. RPS spoke to Tom Miller and he said he will get back to RPS with comments.	Phone	-
29/07/2014	Verbal response received from Maree T/A Wallangan Cultural Services. RPS spoke to Maree Waugh and she said she was happy with the report.	Phone	-
29/07/2014	Verbal response received from Mingga Consultants. RPS spoke with Clifford Matthews and he advised that he didn't work at the Wambo Coal Mine.	Phone	-
29/07/2014	RPS called Muswellbrook Cultural Consultants, left voice messages with two phone numbers.	Phone	-
29/07/2014	Verbal response received from Myland Cultural Heritage Group. RPS spoke with Warren Schillings and he is going to get back to RPS with comments.	Phone	-
29/07/2014	Verbal response received from Jeffrey Matthews who spoke with RPS and said he is happy with the report.	Phone	-
29/07/2014	Verbal response received from Lorraine Towney, who spoke with RPS and said she is happy with the report.	Phone	-
29/07/2014	Verbal response received from Scott Smith who spoke with RPs and he said he is happy with the report.	Phone	-
29/07/2014	RPS called Roslyn Sampson, phone number is incorrect.	Phone	-
29/07/2014	RPS called Jill Green, phone number is temporary unavailable.	Phone	-
29/07/2014	RPS called Ngarramang-Kuri Aboriginal Cultural and Heritage, phone number is not accepting incoming calls.	Phone	-
29/07/2014	Verbal response received from Roger Noel Matthews. Roger will call RPS back with comments.	Phone	-
29/07/2014	RPS called Smith Dhagaans Cultural Group, left a voice message on phone.	Phone	-
29/07/2014	RPS called T & G Culture Consultants, phone number is incorrect.	Phone	-
29/07/2014	RPS called Ungooroo Aboriginal Corporation, RPS left a voice message on phone.	Phone	-
29/07/2014	RPS called Upper Hunter Heritage Consultants, RPS left a voice message on phone.	Phone	-

Date	Consultation Description	Method of Contact	Outcomes/Purpose
29/07/2014	Verbal response received from Upper Hunter Wonnarua Council. RPS spoke with Laurie Perry and he said he or Rhonda Perry will get back to RPS with comments.	Phone	-
29/07/2014	RPS called Valley Culture, phone number could not be connected.	Phone	-
29/07/2014	RPS called Waabi Gabinya Cultural Consultants, RPS left a voice message on phone.	Phone	-
29/07/2014	RPS called Warragil Cultural Services, RPS left a voice message on phone.	Phone	-
29/07/2014	Verbal response received from Wattaka Wonnarua Cultural Consultancy Services. RPS spoke with Des Hickey, and he said he is happy with the report.	Phone	-
29/07/2014	RPS called Widescope Indigenous Group, left a voice message on Amanda Hickey's phone.	Phone	-
29/07/2014	Verbal response received from Wonnarua Culture Heritage. RPS spoke with Gordon Griffiths and he will look at report and get back to RPS with comments.	Phone	-
29/07/2014	Verbal response received from Wonnarua Nation Aboriginal Corporation, RPS spoke with Laurie Perry, and he said he will have a look at the report and get back to RPS with comments.	Phone	-
29/07/2014	RPS called Wurrumay Consultants, RPS left a voice message on phone.	Phone	-
29/07/2014	RPS called Yinaar Cultural Services, all three phone numbers were not connected or invalid.	Phone	-
1/08/2014	Reminder email of due date for comments on draft report made to Culturally Aware.	Email	-
1/08/2014	Reminder email of due date for comments on draft report made to Hunter Valley Cultural Surveying.	Email	-
1/08/2014	Reminder email of due date for comments on draft report made to Yarrawalk a division of Tocomwall Pty Ltd.	Email	-
1/08/2014	Yarrawalk a division of Tocomwall Pty Ltd responded by email that they did not support and will not comment on the draft report.	Email	-
1/08/2014	Reminder email of due date for comments on draft report made to Wanaruah Local Aboriginal Land Council.	Email	-
1/08/2014	Reminder email of due date for comments on draft report made to Kauwul (Wonn1).	Email	-
1/08/2014	Reminder email of due date for comments on draft report made to Wonnarua Traditional Owners.	Email	-
1/08/2014	Reminder email of due date for comments on draft report made to Ungooroo Cultural & Community Services.	Email	-

Appendix 2

Aboriginal Consultation – Written Responses to and from the Registered Aboriginal Parties (RAPs)



WAMBO COAL PTY LTD

ABN: 13 000 668 057

100 Melbourne Street
South Brisbane Qld 4101

PMB 1
Singleton NSW 2330
Australia
Tel + 61 (0) 2 6570 2200
Fax+ 61 (0) 2 6570 2290

22 May 2014

Attn: Insert contact name
Company
Address line 1
Address line 2
Suburb State Postcode

Via: Email/ Mail

Dear Name

**RE: PROPOSED METHODOLOGY – NORTH WAMBO UNDERGROUND MINE
LONGWALL 10A MODIFICATION CULTURAL HERITAGE IMPACT ASSESSMENT**

Please find enclosed for your review, a copy of the Proposed Methodology for the North Wambo Underground Mine Longwall 10A Modification (the Modification).

In accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water, 2010) issued by the NSW Office of Environment and Heritage, we have provided the Proposed Methodology for your review and feedback. Your feedback may include the identification of issues or areas of cultural significance that may be used to affect, inform or refine the Proposed Methodology.

If you wish to provide input on the following, please make a submission to Jeremy Hill by **5.00pm Monday 23 June 2014**:

- The nature of the Proposed Methodology.
- Any Aboriginal objects or places of cultural value within the investigation area, or issues of cultural significance, that you are aware of.
- Any restrictions or protocols you may consider necessary in relation to any information of sensitivity that you may provide.
- Any other factors you consider to be relevant to the heritage assessment.

All comments received will be taken into consideration as the Methodology is finalised.

Information Session

An Information Session with all Registered Aboriginal Parties, the consulting archaeologist and Wambo Coal Pty Ltd (WCPL) representatives will be held on **Wednesday 11 June 2014** to discuss the Modification. The information session will be held at the WCPL administration offices, and will commence at **10:00am** and conclude at approximately **12:00pm**.

At this information session WCPL will provide a presentation on the nature and scale of the proposed Modification, an overview of the impact assessment process and discuss the roles, functions and responsibilities of participants and protocols for the management of any sensitive cultural heritage information. This information session will also provide Registered Aboriginal Parties with an opportunity to raise any cultural issues or comments/perspectives regarding the proposed Modification or the Proposed Methodology. Note that issues can also be raised at any point during the consultation process.

Can you please indicate whether you are interested in attending the information session by **Wednesday 4 June 2014**. If you are not able to attend the information session on the **11 June 2014**, the presentation material can be posted and/or emailed to you.

Any feedback with respect to the Proposed Methodology is to be provided by **5.00pm Monday 23 June, 2014**.

Please provide your feedback to Jeremy Hill:

jeremy.hill@rpsgroup.com.au
RPS
PO Box 428
Hamilton NSW 2292
Phone: 02 4940 4200
Fax: 02 4961 6794

Kind Regards

A handwritten signature in black ink, appearing to read 'Troy Favell', with a stylized flourish at the end.

Troy Favell

Manager: Environment and Community
Peabody Energy: Wambo Coal Pty Ltd
Phone: +61 (0)2 6570 2209
Mobile: +61 (0)407 802 206
tfavell@peabodyenergy.co
m

**Newcastle Office**

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PO Box 428, Hamilton, NSW Australia 2303

T +61 2 4940 4200 F +61 2 4961 6794 E newcastle@rpsgroup.com.au W rpsgroup.com.au

Our Ref: 108453-3: GG

Date: 22 May 2014

**RE: PROPOSED METHODOLOGY FOR THE NORTH WAMBO UNDERGROUND MINE
LONGWALL 10A MODIFICATION - CULTURAL HERITAGE IMPACT ASSESSMENT**

Introduction

Wambo Coal Pty Ltd (WCPL) owns and operates the Wambo Coal Mine (Wambo), located approximately 15 kilometres west of Singleton in the Hunter Valley, New South Wales (NSW).

Wambo adjoins grazing land to the south, other coal mining operations to the east and north, grazing land to the north-west and the Wollemi National Park to the west and south-west (**Figure 1**, Attachment 1).

A range of open cut and underground mining operations have been conducted at Wambo since mining operations commenced in 1969. Mining under Development Consent DA 305-7-2003 commenced in 2004 and currently both open cut and underground operations are conducted. The approved run-of-mine coal production rate is 14.7 million tonnes per annum and product coal is transported from Wambo by rail.

WCPL is seeking to engage with Registered Aboriginal Parties (RAPs) as part of the preparation for lodgement of a request to the NSW Minister for Planning under the *Environmental Planning & Assessment Act, 1979* (NSW) and the *Environmental Planning and Assessment Regulation, 2000* (NSW) to modify Development Consent (DA 305-7-2003) for Wambo, granted by the NSW Minister for Planning on 4 February 2004.

Following a review of mine planning and recent exploration results, WCPL has identified additional coal reserves adjoining the existing North Wambo Underground Mine that can be economically mined with underground mining methods.

An Environmental Assessment will be prepared to support an application to modify the Wambo Development Consent (DA 305-7-2003) to allow for an extension to the approved North Wambo Underground Mine, referred to as the North Wambo Underground Mine Longwall 10A Modification (the Modification).

The proposed Modification would include the extension of the existing North Wambo Underground Mine. The extension would involve the addition of one longwall panel (Longwall 10A) which will be located to the east of the existing approved North Wambo Underground Mine (**Figure 1**, Attachment 1). The proposed Modification Project Area is shown on **Figure 2** in Attachment 1.

The existing Wambo and North Wambo Underground Mine infrastructure would be utilised for the Modification.

An Environmental Assessment would be prepared for the Modification and it is expected to include the following key specialist assessments:

- Cultural Heritage Impact Assessment (CHIA);
- subsidence assessment;
- groundwater assessment;
- surface water assessment; and
- terrestrial flora and fauna assessments.

In accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW 2010), WCPL will be preparing a CHIA for the Modification. Should impact to Aboriginal heritage sites be unavoidable, WCPL would seek a variation to its existing Aboriginal Heritage Impact Permit (AHIP) # 2222 for the Modification.

The Proposed Methodology for the Aboriginal cultural heritage assessment of the Modification Project Area (**Figure 2**, Attachment 1) is outlined below. WCPL invites the RAPs to provide comments (either verbally or in writing) on the Proposed Methodology.

Previous Archaeological Investigations

Various Aboriginal cultural heritage survey and assessments have previously been undertaken at Wambo including (but not limited to):

- Wambo Development Project Environmental Impact Statement (White 2003).
- Application for Permit Under Section 87 and Consent Under Section 90 of the National Parks and Wildlife Act 1974 (Wambo Coal Pty Limited 2005).
- Montrose East Underground Mine Modification: Aboriginal Cultural Heritage Impact Assessment (RPS 2011).
- North Wambo Underground Mine Modification: Cultural Heritage Impact Assessment (RPS 2012).
- Wambo Coal Pty Ltd staged salvage 2009 – 2013.

Based on the results of the previous investigations, a total of five extant Aboriginal heritage sites have been identified within the Modification Project Area (Attachments 1 and 2). Nine other sites lie in close proximity to the Modification Project Area. **Figure 2** (Attachment 1) shows the Modification Project Area and the location of registered extant Aboriginal heritage sites (i.e. sites registered on the Aboriginal Heritage Information Management System (AHIMS) database that have not been subject to salvage as they lie outside of the current Consent #2222 S87/S90 boundary). Attachment 2 provides further information on the registered extant Aboriginal heritage sites within the Modification Project Area.

Proposed Methodology

The Proposed Methodology for the CHIA is as follows:

- Provision of existing information on Aboriginal heritage sites within the Modification Project Area and surrounds. Attachment 1 shows the Modification Project Area (**Figure 1**) and registered extant Aboriginal heritage sites (i.e. sites registered on the AHIMS database) (**Figure 2**). Attachment 2 lists details of the registered extant Aboriginal heritage sites within the Modification Project Area.
- Organisation of field survey to enable RAPs (according to the existing and established roster system) to inspect the Modification Project Area and Aboriginal heritage sites/areas of interest within the Modification Project Area.
- Modification Information Session to enable RAPs to review maps and other information relating to the Modification Project Area, review information relating to the previously recorded sites and an opportunity to have input into the Aboriginal cultural heritage assessment and management processes, including providing cultural information relevant to the proposed Modification.
- Conduct an archaeological assessment (including an archaeological significance assessment) of Aboriginal heritage sites within the Modification Project Area (which will include the use of existing information).
- A request by WCPL to the RAPs for additional comments regarding the cultural significance of Aboriginal heritage sites and/or areas within the Modification Project Area.
- In consultation with the RAPs, identification of recommended management and mitigation measures for Aboriginal heritage sites/areas within the Modification Project Area.
- Provision of a draft CHIA to all RAPs for review and comment.
- Documentation of feedback from RAPs received as part of the Aboriginal cultural heritage assessment for presentation in the final CHIA report (subject to the sensitivity of the information provided).

WCPL requests that, in accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010) the RAPs provide cultural information during the CHIA reporting process (where relevant) whether there are:

- Aboriginal objects of cultural value to Aboriginal people in the Modification Project Area or surrounds; and
- places of cultural value to Aboriginal people in the Modification Project Area or surrounds.

This may include places of social, spiritual and cultural value, historic places with cultural significance, and potential places/areas of historic, social, spiritual and/or cultural significance.

Sensitive Cultural Information - Management Protocol

In the event that a RAP has sensitive or restricted public access information it is proposed that WCPL would manage this information (if provided by the Aboriginal community) in accordance with a sensitive cultural information management protocol. It is anticipated that the protocol would include making note of and managing the material in accordance with the following key limitations/requirements as advised by Aboriginal people at the time of the information being provided:

- any restrictions on access to the material;
- any restrictions on communication of the material;
- any restrictions on the location/storage of the material;
- any cultural recommendations on handling the material;
- any contextual information;
- any names and contact details of persons authorised by the relevant Aboriginal stakeholder to make decisions concerning the Aboriginal material and the degree of authorisation;
- any details of any consent given in accordance with customary law;
- the level of confidentiality to be accorded to the material; and
- any access and use by the RAPs, of the cultural information in the material evidence.

All RAPs should be aware of the mandatory NSW Office of Environment and Heritage requirement that all feedback provided must be documented in the final Aboriginal cultural heritage assessment report, including copies of any submissions received and the proponents response to the issues raised.

Cultural Heritage Impact Assessment Report

Following the undertaking of any required field components and consultation on the Proposed Methodology, a draft CHIA report will be prepared. The draft CHIA report will be provided to the RAPs for review and comment and will include:

- Details of the objects and places identified within the Modification Project Area and an assessment of potential impacts from the Modification.
- Detailed records of the consultation conducted with RAPs and how comments received throughout the assessment process were considered.
- Management and mitigation recommendations drawing on information provided by RAPs and the results of the CHIA.

Critical Timelines

Critical timelines for the Modification CHIA are outlined below. Please note that these timelines are estimates at this early stage in the process and are provided to allow forward planning of personnel and resources. WCPL will provide subsequent notification and clarification (i.e. actual dates and approach for field work participation) of the below timelines, once greater certainty is available.

- (1) Field survey 1 to 2 days, **early June 2014**. RAPs to be involved based on the established roster will be notified of specific dates, once available.
- (2) Collation of culturally significance information: **Ongoing throughout process** until end of draft CHIA report review period.
- (3) Information Session – **11 June 2014**.
- (4) Provision of comments on Proposed Methodology to WCPL due **23 June 2014**.
- (5) Provision of a draft CHIA (including proposed management and mitigation measures) to RAPs for review and comment: **July - August 2014** (following field survey).
- (6) Provision of comments (from RAPs) on draft CHIA to WCPL: **July – August 2014** (due 28 days from mail out of draft CHIA).
- (7) Finalise CHIA in consideration of comments received: **August 2014**.

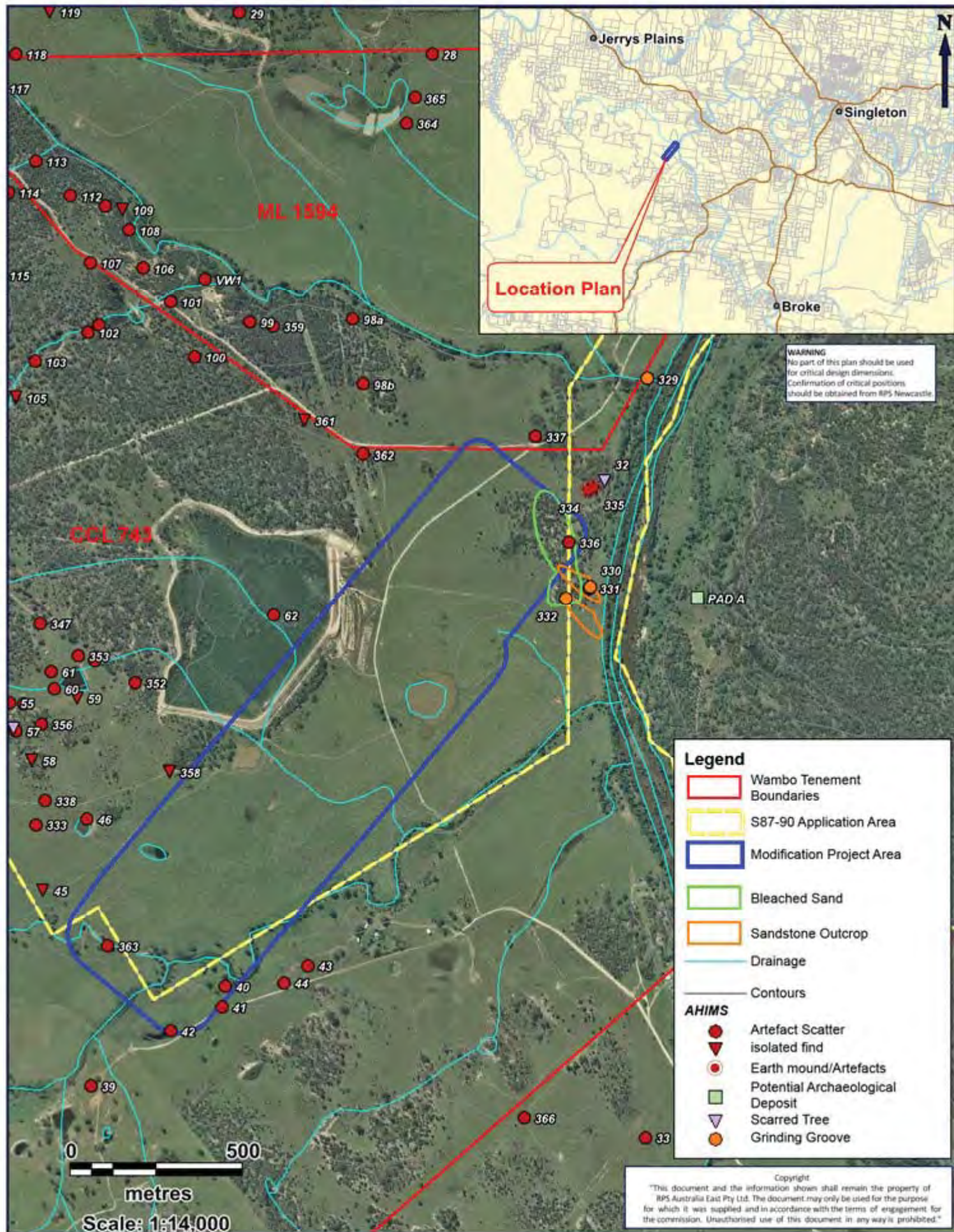
References

- DECCW. 2010. "Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 Part 6 National Parks and Wildlife Act." Sydney: Department of Environment Climate Change and Water NSW,.
- RPS. 2011. "Montrose East Underground Modification: Aboriginal Cultural Heritage Impact Assessment." Wambo Coal Pty Ltd.
- RPS. 2012. "North Wambo Underground Mine Modification Cultural Heritage Impact Assessment." Prepared for Wambo Coal Pty Ltd.
- Wambo Coal Pty Limited. 2005. "Application for Permit Under Section 87 and Consent Under Section 90 of the National Parks and Wildlife Act 1974." Wambo Coal Pty Limited.
- White, E. 2003. "Wambo Development Project Environmental Impact Statement. Appendix D, Volume 3: Aboriginal Heritage Assessment." Wambo Coal Mine Pty Ltd.



ATTACHMENT 1

NORTH WAMBO UNDERGROUND MINE LONGWALL 10A MODIFICATION
PROJECT AREA



ATTACHMENT 1 FIGURE 2

TITLE: REGISTERED EXTANT SITES AND
SITES EXTENTS WITHIN PROJECT AREA

LOCATION: NORTH WAMBO

DATUM: (GDA 94)
PROJECTION: MGA ZONE 56

DATE: 20/05/2014
PURPOSE: HERITAGE

LAYOUT REF: M:\wambo\A100453.A
VERSION (PLAN BY): C A4 (GG-NW)

CLIENT: WAMBO COAL PTY LTD
JOB REF: 108453-3

RPS AUSTRALIA EAST PTY LTD (ABN 44 140 292 762)
241 DENISON STREET BROADMEADOW PO BOX 428 HAMILTON NSW 2303
T: 02 4940 4200 F: 02 4961 6794 www.rpsgroup.com.au

RPS

ATTACHMENT 2

REGISTERED EXTANT ABORIGINAL SITES WITHIN AND IN CLOSE PROXIMITY TO THE MODIFICATION PROJECT AREA

Wambo Site Name (Refer Figure 2, Attachment 1)	AHIMS #	Easting (GDA 94)	Northing (GDA 94)	Site Type
32	37-5-0188	311720 (AGD)	6391380 (AGD)	Scar tree
39	37-5-0194	309390 (AGD)	6389550 (AGD)	Artefact Scatter
40	37-5-0195	310400 (AGD)	6390030 (AGD)	Artefact scatter
41				
42				
43				
44	37-5-0196	310830 (AGD)	6390230 (AGD)	Artefact scatter
329	37-5-0637	311989	6392176	Grinding groove
330	37-5-0638	311825	6391572	Grinding bowl
331	37-5-0639	311820	6391568	Grinding bowl
332	37-5-0640	311753	6391537	Grinding bowl
334	37-5-0642	311817	6391853	Earth mound
335	37-5-0643	311833	6391861	Earth mound
336	37-5-0644	311712	6391696	Artefact Scatter
337	37-5-0619	311664	6392008	Artefact scatter
363	37-5-0625	310993	6392054	Artefact scatter



WAMBO COAL PTY LTD

ABN: 13 000 668 057
100 Melbourne Street
South Brisbane Qld 4101

4 June 2014

Mr. Scott Franks
Yarrowalk (a division of Tocomwall Pty Ltd)
PO Box 76
CARINGBAH NSW 1495

PMB 1
Singleton NSW 2330
Australia
Tel + 61 (0) 2 6570 2200
Fax+ 61 (0) 2 6570 2290

Attention: Scott Franks

Dear Scott,

**RE: NORTH WAMBO UNDERGROUND MINE LONGWALL 10A MODIFICATION –
ABORIGINAL CULTURAL HERITAGE ASSESSMENT**

We understand that you recently had several discussions with Tessa Boer-Mah from RPS Australia Asia Pacific regarding the North Wambo Underground Mine Longwall 10A Modification Aboriginal Cultural Heritage Assessment (the Modification ACHA).

Following these discussions, please note that Wambo Coal Pty Ltd (WCPL) considers that the consultation process for the Modification ACHA (including the provision of a Proposed Methodology, approach to survey work and timing of survey work) is in substantial compliance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010). If Yarrowalk or any other Registered Aboriginal Party has comments which WCPL reasonably considers would change the current approach for the field surveys (i.e. pedestrian survey across the extent of the Study Area that has not been subject to previous systematic survey), WCPL commits to re-surveying the Study Area following the Proposed Methodology review period. WCPL would still appreciate your involvement in any further field surveys if and as required.

In accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010), WCPL can only limit consultation where an approved determination of Native Title exists over the Study Area. WCPL is not aware of any approved Native Title Determinations across the Study Area.

Please do not hesitate to contact the undersigned should you have any queries.

Kind Regards,

Troy Favell

Manager: Environment and Community
Peabody Energy
WAMBO COAL PTY LTD
Phone +61 (0)2 6570 2209
Mobile +61 (0)407 802 206
tfavell@peabodyenergy.com

18 June 2014

Attn: Insert contact name
Company
Address line 1
Address line 2
Suburb State Postcode

Attention: Insert contact name

Dear Name,

**NORTH WAMBO UNDERGROUND MINE LONGWALL 10A MODIFICATION – INFORMATION
SESSION PRESENTATION MATERIAL**

As you would be aware, an information session for the North Wambo Underground Mine Longwall 10A Modification Aboriginal Cultural Heritage Assessment was held on Wednesday 11 June 2014.

For your records, please find enclosed a copy of the presentation material.

Should you wish to provide comments on the Proposed Methodology or if you have any queries regarding the Aboriginal Cultural Heritage Assessment, please contact Jeremy Hill via the contact details below.

Jeremy Hill
RPS
PO BOX 428
HAMILTON 2303
Phone: 4940 4200
Fax: 4961 6794
Email: jeremy.hill@rpsgroup.com.au

Yours sincerely,

A handwritten signature in dark ink, appearing to read "Troy Favell", written over a light blue circular stamp.

TROY FAVELL
Environment and Community Manager
Wambo Coal Pty Ltd
Email: tfavell@peabodyenergy.com



***North Wambo Underground Mine
Longwall 10A Modification
Information Session***

11 June 2014

***Troy Favell
Manager: Environment & Community
Wambo Coal Pty Ltd***



Agenda



- Introduction.
- Longwall 10A Modification Overview.
- Aboriginal Cultural Heritage Impact Assessment Process.
- Cultural Assessment.
- Archaeological Assessment.
- Aboriginal Cultural Heritage Assessment Report.
- Roles of Participants.
- Management of Sensitive Information.
- Comments on Proposed Methodology.
- Timing for Next Steps.

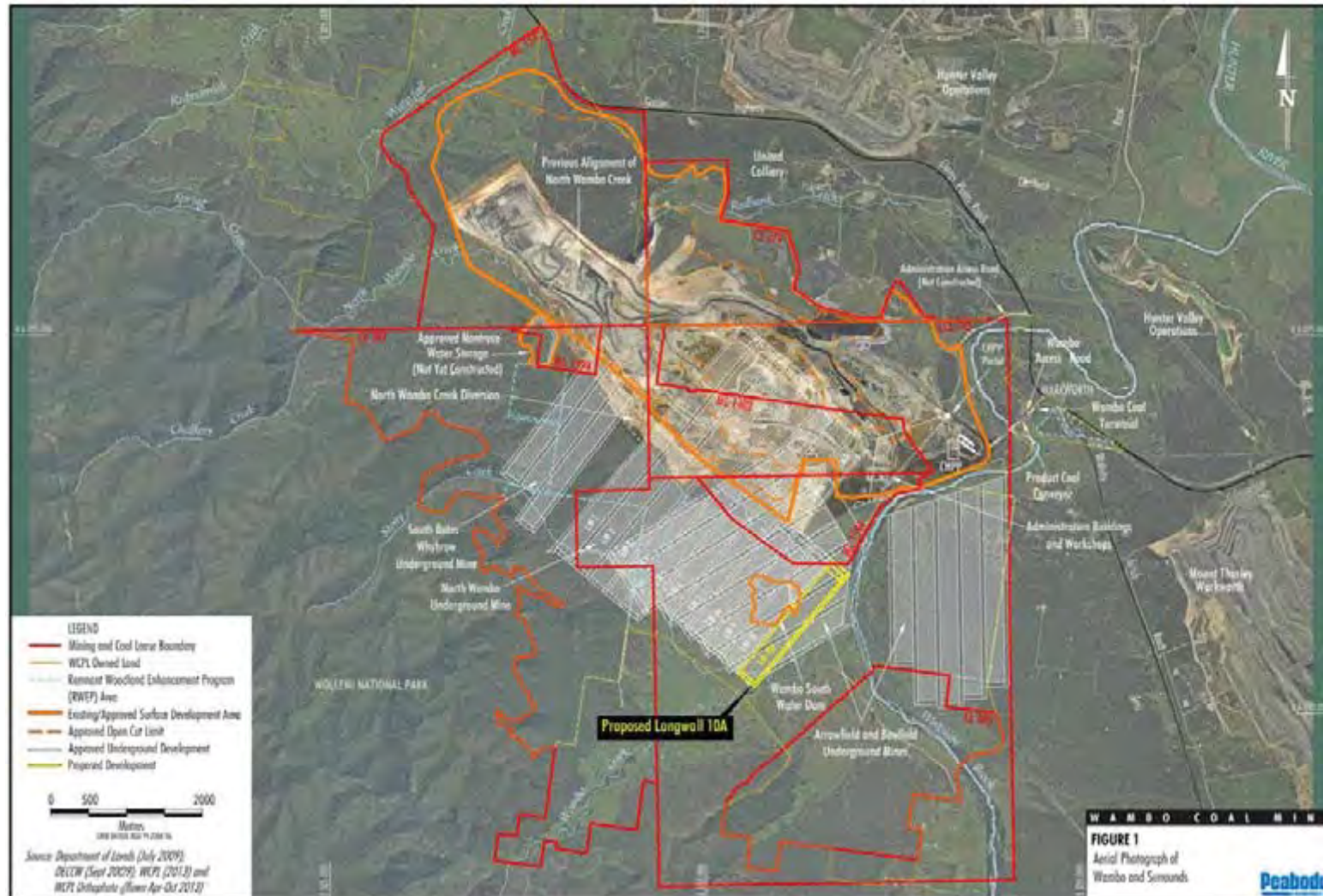
Introduction



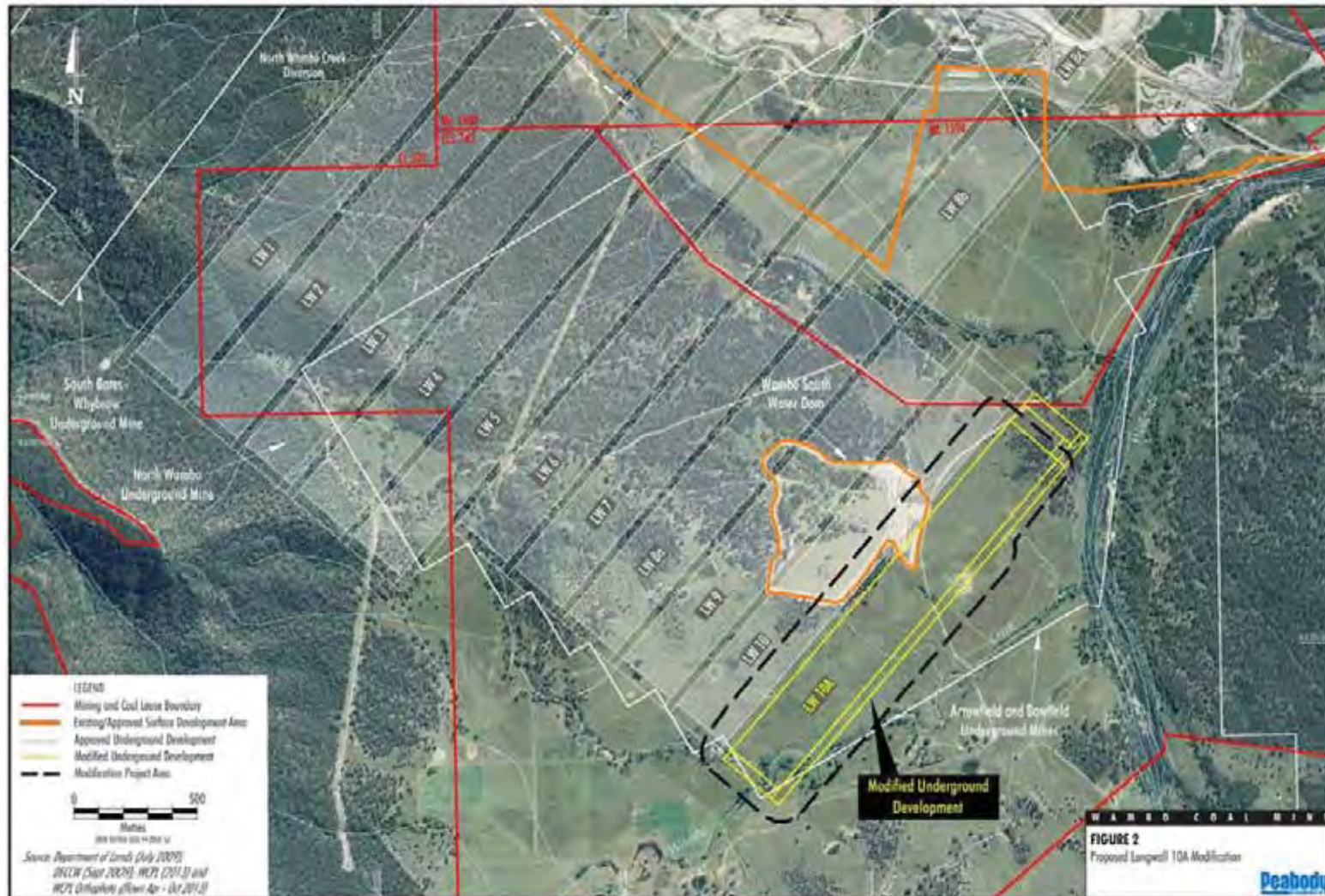
- Wambo Coal Mine:
 - Owned and operated by Wambo Coal Pty Ltd (WCPL), a subsidiary of Peabody Energy Australia Pty Limited.
 - A range of open cut and underground mine operations have been conducted at Wambo since mining operations commenced in 1969.
 - Workforce consists of approximately 842 employees and contractors.
- Key personnel for this Modification Application:
 - Troy Favell (Wambo Coal Pty Ltd – Manager: Environment & Community).
 - Gillian Goode (RPS – Senior Cultural Heritage Consultant) – Project Archaeologist.
 - Jeremy Hill (RPS – Cultural Heritage Consultant) – Contact for Comments on Proposed Methodology and Draft ACHA.



Wambo Coal Mine



Longwall 10A Modification



Longwall 10A Modification Overview



- One additional longwall panel (Longwall 10A) (in the Wambo Seam) located in an area previously mined (Whybrow Seam) and with existing approval to mine (in the Arrowfield and Bowfield Seams).
- Longwall 10A Modification required for continuity of operations.
- No additional surface disturbance works proposed, other than remediation works (if required).
- Variation to existing AHIP #2222 to allow for minor additional disturbance area.

Aboriginal Cultural Heritage Impact Assessment Process



Gillian Goode (RPS Australia Asia Pacific) – Project archaeologist.

- Cultural Assessment – relies on information from **Aboriginal stakeholders**.
- Archaeological Assessment including site inspection/survey.
- Consultation on survey findings and appropriate management.
- Draft ACHA Report.
- Stakeholder comments on the draft ACHA.
- Finalise ACHA.
- Consultation with Aboriginal stakeholders throughout the process.

Cultural Assessment



- WCPL requests that Aboriginal stakeholders provide any relevant cultural information regarding:
 - Aboriginal objects of cultural value to Aboriginal people within the area of the Modification.
 - Places of cultural value to Aboriginal people within the area of the Modification.
- This information is critical for a comprehensive assessment and development of appropriate management.
- The Cultural Assessment and consultation process will include the following:
 - Recording responses on cultural significance that might affect, inform or refine the draft assessment methodology.
 - Consultation on the context and cultural value of Aboriginal objects and/or places.
 - Consultation regarding potential management options for relevant known Aboriginal objects and/or places.
 - Document feedback in the final ACHA report.

Archaeological Assessment



The Archaeological Assessment will include the following:

- Searches of AHIMS, National Heritage List and Commonwealth Heritage List.
- Review of relevant reports and publications, including previous archaeological investigations and management reports.
- Site inspection/ground survey.
- Significance and impact assessment.
- Preparation of an ACHA report.

Aboriginal Cultural Heritage Assessment Report



The draft ACHA will be provided to Aboriginal stakeholders for review and feedback and will include:

- Details of the objects, places and values identified and an assessment of potential impacts.
- Records of the Aboriginal stakeholder consultation conducted and how any comments received were considered.
- Proposed management and mitigation recommendations.

Roles of Participants



- The OEH Consultation Guideline *Aboriginal Cultural Heritage Consultation Requirements For Proponents 2010* (DECCW, 2010) indicates:
 - *“The interests and obligations of Aboriginal people relate to the protection of Aboriginal cultural heritage.”*
 - *“It is only Aboriginal people who can determine who is accepted by their community as being authorised to speak for Country and its associated cultural heritage.”*
- In addition the guideline states Aboriginal people should:
 - *“Have an awareness and understanding of the commercial environment and constraints in which proponents operate.”*
 - *“Develop and display an awareness and understanding of the opportunities to input into regulatory processes to contribute to decision making by proponents and government authorities.”*

Roles of Participants (Continued)



- **The OEH Consultation Guideline Aboriginal Cultural Heritage Consultation Requirements For Proponents 2010 (DECCW, 2010) indicates that Proponents should:**
 - *“Bring the registered Aboriginal parties or their nominated representatives together and be responsible for ensuring appropriate administration and management of the consultation process.”*
 - *“Consider the cultural perspectives, views, knowledge and advice of the registered Aboriginal parties involved in the consultation process in assessing cultural significance and developing any heritage management outcomes for Aboriginal object(s) and/or place(s).”*
 - *“Provide evidence to DECCW [now known as the OEH] of consultation by including information relevant to the cultural perspectives, views, knowledge and advice provided by the registered Aboriginal parties.”*
 - *“Accurately record and clearly articulate all consultation findings in the final cultural heritage assessment report.”*
 - *“Provide copies of their cultural heritage assessment report to the registered Aboriginal parties who have been consulted.”*

Management of Sensitive Information



In the event that an Aboriginal stakeholder has sensitive or restricted public access information:

- WCPL would make note of and manage the material in a manner agreed with the Aboriginal people/person at the time of the information being provided.
- A specific sensitive cultural information management protocol can be developed for this if required.

Comments on the Proposed Methodology



In accordance with the OEH Consultation Guideline *Aboriginal Cultural Heritage Consultation Requirements For Proponents 2010* (DECCW, 2010):

- WCPL has provided a Proposed Methodology for your review and feedback.
- Feedback on the Proposed Methodology is welcomed – preferably provided in writing.
- Any feedback with respect to the Proposed Methodology is to be provided by **5.00 pm Monday 23 June 2014.**

Timing for Next Steps



- Field survey –Thursday 5 June and Friday 6 June 2014.
 - Involvement in field survey based on existing Wambo fieldwork roster.
 - If any submissions or comments are received in regard to the Proposed Methodology that WCPL reasonably considers would have altered the field survey design/implementation, then WCPL commits to consider those submissions and take reasonable steps to address them, having regard to the survey requirements and the objectives of the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010) .
- Comments on Proposed Methodology – due 23 June 2014.
- Draft ACHA report distributed to Aboriginal stakeholders for review and comment – July/August 2014.
- Comments on draft ACHA report – due July/August 2014.
- Finalisation of the ACHA report in consideration of comments received – August 2014.
- A copy of the final ACHA will be provided to Aboriginal stakeholders.

THANK YOU

Peabody
ENERGY



WAMBO COAL PTY LTD

ABN: 13 000 668 057

Level 13, BOQ Centre
259 Queen Street
Brisbane, Queensland 4000
PMB 1
Singleton, NSW 2330
Australia
Tel + 61 (0) 2 6570 2200
Fax + 61 (0) 2 6570 2290

4 July 2014

Company
Insert contact name
Address line 1
Address line 2
Suburb State Postcode

Attention: Insert contact name

Dear Name,

**NORTH WAMBO UNDERGROUND MINE LONGWALL 10A MODIFICATION – DRAFT
CULTURAL HERITAGE IMPACT ASSESSMENT**

Please find enclosed for your review, a copy of the Draft Cultural Heritage Impact Assessment (CHIA) for the North Wambo Underground Mine Longwall 10A Modification (the Modification).

In accordance with the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (Department of Environment, Climate Change and Water, 2010) issued by the NSW Office of Environment and Heritage, we have provided the Draft CHIA for your review and feedback. Your feedback may include the identification of issues or areas of cultural significance that may be used to affect, inform or refine the Draft CHIA.

If you wish to provide input on the following, please make a submission to Jeremy Hill by **5.00pm Tuesday 5 August 2014**:

- Any Aboriginal objects or places of cultural value within the investigation area, or issues of cultural significance, that you are aware of.
- Any restrictions or protocols you may consider necessary in relation to any information of sensitivity that you may provide.
- Any other factors you consider to be relevant to the heritage assessment.

All comments received will be taken into consideration as the CHIA is finalised.

Any feedback with respect to the Draft CHIA is to be provided by 5.00pm Tuesday 5 August 2014.

Please provide your feedback to Jeremy Hill:

Jeremy Hill
RPS
PO BOX 428
HAMILTON 2303
Phone: 4940 4200
Fax: 4961 6794
Email: jeremy.hill@rpsgroup.com.au

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Troy Favell', is positioned above the printed name and title.

TROY FAVELL
Environment and Community Manager
Wambo Coal Pty Ltd
Email: tfavell@peabodyenergy.com

Gillian Goode

From: Scott Franks [scott@tocomwall.com.au]
Sent: Friday, 1 August 2014 4:34 PM
To: Laraine Nelson; yarrowalk@tpg.com.au
Cc: Gillian Goode; Maria Cotter; Richard Bath
Subject: Re: Wambo Longwall Draft Report - Comments

Dear Laraine,

Tocomwall and PCWP do not support or will it comment on a draft report that has not followed the CCGL for proponents. We have made it quite clear that Wombo have not complied, Tocomwall was contacted to conduct a field survey well before the comment period expired for the Methordoilgy. Tocomwall request that OEH investergate Wombo mine for possible none complainaince of the current consolation guild lines.

We are more then happen to make available all and any correspondence with regard to this issue to OEH and Dopi.

Regards
Scott Franks

Native Title & Environmental Services Manager

Tocomwall Pty Ltd
PO Box 76
CARINGBAH NSW 1495
m: 0404 171544
p: 02 9542 7714
f: 02 9524 4146
e: scott@tocomwall.com.au
www.tocomwall.com.au

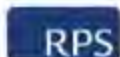
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From: Laraine Nelson <Laraine.Nelson@rpsgroup.com.au>
Date: Friday, 1 August 2014 3:42 pm
To: Scott Franks <yarrowalk@tpg.com.au>, Scott Franks <scott@tocomwall.com.au>
Cc: Gillian Goode <Gillian.Goode@rpsgroup.com.au>
Subject: Wambo Longwall Draft Report - Comments

Hi Scott

Just a reminder that the comments for the Wambo Longwall Draft Report are due by 5th August 2014.

Best regards



Laraine Nelson



WAMBO COAL PTY LTD
ABN: 13 000 668 057

6 August 2014

Ronald Fenwick
PO Box 62
SINGLETON NSW 2330

Level 13, BOQ Centre
259 Queen Street
Brisbane, Queensland 4000
PMB 1
Singleton, NSW 2330
Australia
Tel + 61 (0) 2 6570 2200
Fax + 61 (0) 2 6570 2290

Dear Ronald,

**RE: NORTH WAMBO UNDERGROUND MINE – LONGWALL 10A MODIFICATION DRAFT
CULTURAL HERITAGE IMPACT ASSESSMENT**

I understand that you have contacted RPS to advise that you did not receive a copy of the Draft Cultural Heritage Impact Assessment (CHIA) for the North Wambo Underground Mine Longwall 10A Modification.

Please note that a hard copy of the Draft CHIA was posted to the following address on 4 July 2014:

Attention: Ronald Fenwick
PO Box 62, SINGLETON NSW 2330

Notwithstanding, please find enclosed an additional copy of the Draft CHIA for your review and feedback.

If you wish to provide input on the following, please make a submission by **5.00pm Wednesday 20 August 2014**:

- Any Aboriginal objects or places of cultural value within the investigation area, or issues of cultural significance, that you are aware of.
- Any restrictions or protocols you may consider necessary in relation to any information of sensitivity that you may provide.
- Any other factors you consider to be relevant to the heritage assessment.

All comments received will be taken into consideration and provided to the NSW Department of Planning and Environment and the NSW Office of Environment and Heritage. Any feedback with respect to the Draft CHIA is to be provided by 5.00pm Wednesday 20 August 2014 directly to me via the contact details below:

Post: PMB 1, Singleton, NSW 2330
Email: TFavell@peabodyenergy.com

Yours faithfully

Troy Favell
Environment and Community Manager
WAMBO COAL PTY LTD

Assessment of Aboriginal Cultural Heritage to be conducted for Wambo Coal Mine Longwall 10A

The history of the native population of the Singleton Shire is general correct only to the limits of the white settler's records and is not fully true to available knowledge of the "local" tribes, clans. It does not include proper accounts from local travellers from bordering lands that travelled to and through the area.

It is easy for people to find the records made by the European settlers and through reading these assimilate provenances to support claims to knowledge. The history of the people was kept in the oral history of the clans and was reliable and permanent particularly as they were narrated in the stories of the animals and birds and how the lands were formed and the sacred places were the "books" of the people and did not need to be written as in the books of the white man as these could change for different agendas. The narratives as written in the dreaming place cannot change and remain true by being told by the people.

Written history was not needed in the minds of the elders who saw writing by the whites as taking from them. The status within the clan forbade breaching the traditional passing of the stories.

Understanding of the mindset of the local people was not attempted. The local natives retaliated and defended on honour grounds rather than attacked. Settlers created conflict by not recognising that the land had an ownership and the people belonged to the land before settlement by the British.

Locally there were two predominant clans or tribes that were regular people living within the Hunter Valley, the Daaginyaang traditionally residing within the southern side of the Hunter Valley in the Singleton, Bulga and Broke districts and the Wanaaru-waa residing within the northern side of the Hunter Valley downstream from Singleton. There are records of regular travellers from outside the areas with Dubbo, Bathurst, Mudgee clans and others allied to the Wiradjuri people.

The people were not innocents who failed to realise the white men were selecting their lands for occupation. They learnt of the treachery of the settler through deeds and stories. Unfortunately the clans thought in localised terms, directing their resentment against specific individual settlers and convicts who acted against them. It must be noted that these clans were in feud with others and these retaliations were held over generations as the stories told. This state of suspicion was extended to individual "groups" of whites.

Records show the people uniting in times of threat by the settlers, grievances were personal, in accordance with lore. The people knew those who they were in conflict with and rarely killed strangers.

Locally there were some 15 or so families or clans that moved about the local lands with only minor travels outside. The Wharmboolar, Whollumbi, Wiradjuri, Darkinung, Wonarua, Bulghara were some of these. There are several sites within the area partially recorded, and then only to a minor degree. Many more are only known to some through the traditional means of story through family. Many of these can be found with care as it was determined that the provision of knowledge was to be held by the lores. The dispossession of the cultures is a direct result of European settlement. Ceremonies have been discouraged to the point that

in reference to the ceremonial meeting site referred to as the Bulgar Bora ground has not been used for ceremony since about 1927.

The most significant records now available are held through the women who had no access to the Bora sites and their stories are family based. There are still many descendants within the wider area and some snippets of history are still being passed on.

The status within the clan forbade breaching the traditional passing of the stories outside the strict laws of how and when and by whom certain kinds of knowledge may and may not be passed on.

The interpreting of these stories has been generalised and breaks truth. A number of books have been published that contain secret and sacred knowledge that should never have been passed into the public sphere. This included the reproduction of sacred paintings. Elders realised that this knowledge was not to be “for the books of the whites” and only allowed general information to be passed on with hints of the meanings of the stories and paintings and no specific releases of site locations. The whites proved they could not be trusted. In the process of the stories, and telling of the paintings and markings, the narrator presented what he considered necessary and would be adjusted to the knowledge rights of each audience.

The reference to the Bulgar Bora Ground is an example. To have this site referred to as a specific grid reference according to the records of the National Park and Wildlife Service begs wonder. Who got the exact location and when was it recorded? The last time the site was seen and recorded by whites (not known as aboriginal) was in 1927.

Knowledge of the cultures and scarred sites and ceremonies was not passed on outside the strict laws on the clans.

Another part of culture that is misdirected is the reference to the Kadaicha or Kadicha. Most history of the magic is not completely explained outside the clans. The beliefs and practices of these Spiritual Tribal Advisors, Kadaicha Men, were passed on through ceremony. Bone pointing and the determined pursuits for tribal justice are common stories that come to mind with fear the purpose. The Kadaicha travelled leaving no tracks this helped to conjure the idea of his power.

Within the area to be “assessed” for Wambo there are many sites that could be recorded. To present time there is no need to visit sites for whatever reason and the areas are restricted by modern ownership and laws of the land. Similarly there is no genuine reason today as there was in the early years of settlement to show to the settlers the Boras, the burial sites, the paintings and the ceremonies. To those who know of the sites there is still the suspicion towards others that preserve the cultural nature of them. Within the immediate area there are:

Boras- these are scattered and many have been removed or disturbed through the settlement and farming practices.

Middens- are found throughout the areas where camps were used, where food was located and where ceremonies required people to be. They can also be found in the rock shelters and contained fragments of bone, animal as well as those from burials and tool components.

Burials- sites are found with single and multiple usage reflected by the clans to respect the different levels of the deceased.

Camps and shelters- many are now dispersed or over-covered by clearing, working of the land and the now frequent bushfires.

Culling and massacre sites within the area. There are several of these that have been missed or overlooked within the area that ranges from Bulga to Warkworth and close regions.

Rock Shelters- are largely intact with only animal usage today. Those in this area have had no “tourist” attention and generally only small shelters or are too difficult to reach.

Stone placements- are not prominent or all have been moved for one reason or another.

Cooking and working fire sites- these are found near shelter sites. They were close to special trees for making hunting tools-spear, axe, boomerang as well as for ceremonial instruments. Fire was needed to work the wooden tools-to straighten, point and harden.

Paintings- can still be found

Scar trees- bark removed for many purposes like multipurpose shields that were used also for carrying foods and fire when moving camp and for shelter

Carved trees- to record history of sites of gatherings or special events that took place as well as to indicate boundaries and taboos.

Special trees- that served purposes such as medicinal and shelter as well as spear and didge forming.

Sharpening Stones- are still present and are often overlooked.

Axe and Spear Grinding Grooved rocks- usually special rocks and some had been relocated near camps.

I would point out that there is a need to respect the land and the history during the assessment process and would advise that assurance be given prior and during the assessment fact searching.

The registered aboriginal parties and existing Wambo roster system breaks cultural lore with the traditional “locals” not being considered and potentially not involved in the inspections.

Apart from failing to respect the local people and lands this challenges the authenticity of the claimed findings or lack of findings.

This roster system as set up for Wambo Coal divests the inspections of the cultural links with the lands. There have been many inspections carried out without local people involved and there have been many area traditional breaches in accordance with this policy. Clans that for generations have no welcome in the area have undoubtedly been involved and this is obvious from the aspect that under the roster system the local people may never be notified, respected or involved.

During the time of the Wambo Coal Mine there has only been one investigation taken within the area of Wambo Creek that has been carried out with full respect and consideration for the culture and country. That was the survey that was conducted for the Application for DA 108/91 and was recorded by Tessa Corkill and is noted as 1990.

There are other past surveys claimed that to my knowledge did not occur, or did not occur as the authors claim, or did not obtain the appropriate permissions as required by the laws of the land as well as the lore of the land.

Some of the more recent assessments rely on past information that has not been fully explored and certified by the people claiming to have knowledge, let alone local knowledge.

There is and will most likely never be proper listing for the peoples and the sites in the lands that were travelled to by the "local" clans, and particularly no listings of the Bora or Ceremonial areas within the district.

The search for special foods and the allied associations with other clans were intertwined. Understanding of the animal and bird migrations let them know when and where to go for the plants, fruits where birds and animals were plentiful. Camps were used and reused by clans.

I have not provided any information that will compromise the sites within the area to assess.

I was not notified as to who attend and their family/clan/ tribal link to the lands and it goes without saying that according to the intent of the assessment I should have been appropriately notified.

To date I have heard nothing of the assessment through any of the seven major clans that have connection with the immediate region let alone having input from these. As stated previously I would expect to be involved with all inspections within the immediate area.

Ron Fenwick
19/08/2014

Appendix 3

National Native Title Tribunal Search



Extract from Schedule of Native Title Applications

Application Reference: Federal Court number: NSD1680/2013
NNTT number: NC2013/006

Application Name: Scott McCain Franks and Anor on behalf of the Plains Clans of the Wonnarua People

Application Type: Claimant

Application filed with: Federal Court of Australia

Date application filed: 19/08/2013

Current stage(s): Pre-notification

Registration information: Please refer to the Register of Native Title Claims/National Native Title Register (as appropriate) for registered details of this application.

Registration decision status: Not Accepted for registration

Registration history: -

Applicants: Scott McCain Franks, Robert John Lester

Address(es) for Service: Scott McCain Franks and Robert John Lester
17 River Road
Emu Plains NSW 2750
Phone: 0415 787 844

Additional Information

Not applicable

Persons claiming to hold native title:

The members of the native title claim group are the biological descendants of

(a) Emily (who was born in approximately 1840, and was the mother of Henry Frederick Taggart who was born in Howes Valley, Broke in 1859 and who died on 5 March 1941 in the district of Singleton); and

(b) Mary Shoe (who was born approximately 1800 in the Singleton district, and who was the mother

of Matilda Hughes who was born 1832 at Sydenham near Singleton, who married James Arthur Smith on 28 December 1856 at Fallbrook and who died on 5 October 1913 at Bridgeman, Patricks Plains Shire).

Native title rights and interests claimed:

1. Over areas where a claim to exclusive possession can be recognised (such as where there has been no prior extinguishment of native title, or where ss.47, 47A or 47B apply), the native title claim group claims the right to possess occupy, use and enjoy the lands and waters of the application area as against the whole world, pursuant to the traditional laws and customs of the claim group.

2. Over areas where a claim to exclusive possession cannot be recognised, the native title claim group claims the following rights and interests:

- (a) the right to access the application area;
- (b) the right to camp on the application area;
- (c) the right to erect shelters on the application area;
- (d) the right to live on the application area;
- (e) the right to move about the application area;
- (f) the right to hold meetings on the application area;
- (g) the right to hunt on the application area;
- (h) the right to fish on the application area;
- (i) the right to use the natural water resources of the application area including the beds and banks of the watercourses;
- (j) the right to gather the natural products of the application area (including: food, medicinal plants, timber, stone, ochre and resin) according to traditional laws and customs;
- (k) the right to conduct ceremony on the application area;
- (l) the right to participate in cultural activities on the application area;
- (m) the right to maintain places of importance under traditional laws, customs and practices in the application area;
- (n) the right to protect places of importance under traditional laws, customs and practices in the application area;
- (o) the right to conduct burials on the application area;
- (p) the right to speak for and make non-exclusive decisions about the application area;
- (q) the right to cultivate and harvest native flora according to traditional laws and customs; and
- (r) the right to control access to, and use of, the area by those Aboriginal people who seek access or use in accordance with traditional law and custom.

3. The native title rights and interests are subject to and exercisable in accordance with:

- (a) the laws of the State of New South Wales and the Commonwealth of Australia;
- (b) the rights (past or present) conferred upon persons pursuant to the laws of the commonwealth and the laws of the state of New South Wales; and
- (c) the traditional laws acknowledged and the traditional customs observed by the native title claim group.

Application Area:

State/Territory: New South Wales

Brief Location: The claim encompasses the Hunter Valley, west of Newcastle, extending generally north-westerly to the Upper Hunter and the Liverpool Ranges to Murrurundi, and southerly to the Hunter Range past Cessnock.

Primary RATSIB Area: New South Wales

Approximate size: 11358.0149 sq km

(Note: There may be areas within the external boundary of the application that are not claimed.)

Does Area Include Sea: No

Area covered by the claim (as detailed in the application):

External boundary description

The application area covers all the land and waters within the external boundary described as:

Commencing at the intersect of the southern boundary of the Namoi Catchment and Longitude 150.533544° East and extending generally easterly and generally north easterly along that catchment boundary to the southern boundary of the New England Highway, at Nowlands Gap; then generally south easterly along that boundary to the western bank of the Pages River; then generally south easterly and generally southerly along that bank to the northern boundary of Miranee Road; then generally southerly along that boundary to the northern boundary of Hunter Road; then generally easterly along that boundary to the southern bank of Stewarts Brook; then generally easterly along that bank to its headwaters at Longitude 151.403010° East, Latitude 32.037800° South and onwards to the eastern boundary of the Hunter River catchment at Latitude 32.038192° South; then generally southerly along that catchment boundary to Longitude 151.407614° East; then south easterly to the headwaters of the Patterson River at Longitude 151.409652° East, Latitude 32.047240° South; then generally southerly along the centreline of the Patterson River (passing through Lstock Dam) and onwards to the southern bank of the Hunter River, being the easternmost corner of Lot 1 on DP520557; then generally westerly along that bank to the eastern bank Wallis Creek; then generally southerly along of that bank to the south eastern boundary of Louth Park Road; then generally south westerly and generally south easterly along that boundary to the north western boundary of Buchanan Road; then generally south westerly, generally westerly, again generally south westerly and generally southerly along of that boundary, an unnamed road, George Booth Drive, Richmond Vale Road, Maitland Road and Leggetts Drive (Freemans Drive) to the northeast corner of Lot 21 on DP811883; then generally westerly along the northern boundary of that lot, Lot 7002 on DP93611, Gills Lane and unnamed road to the south western corner of Lot 820 on DP1165469; then southerly, westerly and generally southerly along the western boundaries of Lot 99 on DP755244, Lot 109 on DP755244, Heaton State Forest and Lot 53 on DP755244 to the centreline of Wallis Creek; then generally southerly and generally south westerly along that centreline to Longitude 151.427251° East; then southerly to the southwest corner of Lot 115 on DP755244 and onwards to the southern boundary of Hunter River catchment; then generally south westerly along that southern boundary to Longitude 151.348681° East; then northwest to the headwaters of Watagan Creek at Longitude 151.345650° East, Latitude 33.039180° South; then generally westerly along the centreline of Watagan Creek to the centreline of Wollombi Brook; then generally south easterly along that centreline to the centreline of Fernances Creek; then generally south westerly along that centreline to its headwaters at Longitude 151.098910° East, Latitude 33.074560° South; then south westerly to the headwaters of Mogo Creek at Longitude 151.094420° East, Latitude 33.083870° South; then generally south westerly along the centreline of that creek to the centreline of the Macdonald River; then generally north westerly and generally northerly along that centreline to its headwaters at Longitude 150.585770° East, Latitude 32.745510° South; then south westerly to the headwaters of an unnamed creek at Longitude 150.575770° East, Latitude 32.748320° South; then generally northerly along the centreline of that unnamed creek to the centreline of Martindale Creek at Longitude 150.583610° East; then generally easterly along that centreline to Longitude 150.523690 East; then northerly to the headwaters of Baerami Creek at Longitude 150.523500° East, Latitude 32.676180° South; then generally northerly along the centreline of that creek to the centreline of the Goulburn River; then generally north easterly along that centreline to the centreline of Worondi Rivulet; then generally northerly along that centreline to its headwaters at Longitude 150.449900° East, Latitude 32.062900° South; then north easterly and generally northerly along a spur and ridge top, through Diamond Mountain, Ten Mole Mountain, Leards Gap and Square Top back to the commencement point.

Attachments:

1. Attachment B2 areas not covered by the application, 1 page - A4, 19/08/2013
2. Attachment C Map, 1 page - A4, 19/08/2013
3. Attachment B1 area covered by the application, 2 pages - A4, 19/08/2013

NNTT Contact Details

Address: National Native Title Tribunal
Sydney Office
Level 16, Law Courts Building
Queens Square
SYDNEY NSW 2000

GPO Box 9973
SYDNEY NSW 2001

Telephone: (02) 9227 4000
Freecall: 1800 640 501
Fax: (02) 9227 4030
Web Page: www.nntt.gov.au

End of Extract

NATIVE TITLE DETERMINATION APPLICATION**Plains Clans of the Wonnarua Nation**

 Proposed Plains Clans of the Wonnarua Nation Native Title Determination Application

NOTE: To determine areas subject to claim within the external boundary, reference to the application description is necessary.
Application boundary data compiled by the NNTT.

Topographic image data is © Commonwealth of Australia and is used under licence from Geoscience Australia 2008

NOTE: Topographic images should be used as a guide only.

Map created by: Geospatial Services, National Native Title Tribunal (06/05/2013)

NORTH

0 15

KILOMETRES

Latitude and Longitude based on Geocentric Datum of Australia 1994
NAD Projection

© Commonwealth of Australia 2013

The Registrar, the National Native Title Tribunal and its staff, members and agents and the Commonwealth collectively (the Commonwealth) accept no liability and give no undertakings, guarantees or warranties concerning the accuracy, completeness or fitness for purpose of the information provided. In return for you receiving this information you agree to release and indemnify the Commonwealth and third party data suppliers in respect of all claims, expenses, losses, damages and costs arising directly or indirectly from your use of the information and the use of the information you obtained by any third party.





Registration test decision

Application name	Scott Franks & Anor on behalf of the Plains Clans of the Wonnarua People
Applicant	Scott McCain Franks and Robert John Lester
NNTT file no.	NC2013/006
Federal Court of Australia file no.	NSD1680/2013
Date application made	19 August 2013

I have considered the claim made in the above claimant application for registration against each of the conditions contained in sections 190B and C of the *Native Title Act 1993* (Cwlth) (the Act).¹

For the reasons attached, I do not accept this claim for registration pursuant to s 190A of the Act. For the purposes of s 190D(3), my opinion is that the claim does not satisfy all of the conditions in s 190B.

Date of decision: 27 February 2014

Susan Walsh

[delegate of the Native Title Registrar]

¹ All references in these reasons to legislative sections refer to the *Native Title Act 1993* (Cwlth), as in force on the day this decision is made, unless otherwise specified.

Introduction

Registration test

[1] The Registrar of the Federal Court of Australia (Federal Court) gave a copy of the NSD1680/2013 Plains Clans of the Wonnarua People native title determination application (application) to the Native Title Registrar (Registrar) on 19 August 2013 pursuant to s 63 of the Act. This has triggered the Registrar's duty to consider the claim made in the application for registration in accordance with s 190A: see subsection 190A(1).

[2] I have considered the claim as the Registrar's delegate under an instrument of delegation dated 30 July 2013 pursuant to s 99 of the Act. By this instrument, the Registrar delegated all of the powers given to her under ss 190, 190A, 190B, 190C, 190D and 190E to the Deputy Registrars of the Tribunal and to certain members of the staff assisting the Tribunal (including myself).

[3] Sections 190A(6), (6A)² and (6B) set out the decisions available to the Registrar under s190A. Section 190A(6) provides that the Registrar must accept the claim for registration if it satisfies all of the conditions of s 190B (which deals mainly with the merits of the claim) and s 190C (which deals with procedural and other matters). Section 190A(6B) provides that the Registrar must not accept the claim for registration if it does not satisfy all of the conditions of ss 190B and 190C. I have reached the view that the claim does not satisfy the conditions in ss 190B(5), (6) and (7) and it follows that I must not accept the claim for registration.

Information considered

[4] Section 190A(3) sets out the information to which the Registrar must have regard in considering a claim under s 190A and provides that the Registrar 'may have regard to such other information as he or she considers appropriate'.

Subsection 190A(3)(a): Application and other documents provided by the applicant

[5] As required by s 190A(3)(a), I have had regard to information in the application and accompanying affidavits by the two persons comprising the applicant (Scott McCain Franks and Robert John Lester). I note here that the Form 1 application refers to and provides a number of documents within a series of Attachments (B1, B2, C, F1 to F4, I, J and R) to which I have also had regard, as they form part of the application. The applicant has not provided any other documents to me (see the concluding words of s 190A(3)(a)).

Subsection 190A(3)(b): Searches conducted by the Registrar of State/Commonwealth interest registers

[6] I note that members of the staff assisting the Tribunal are preparing the Registrar's notification of the application pursuant to s 66(3), including notice to proprietary interest holders

² I note that s 190A(6A) does not apply to my consideration, as the claim is not contained in an amended application that has previously been accepted for registration.

in relation to areas where native title may still exist on the basis of current tenure information (e.g. national park or other conservation tenure). To this end, the Registrar has obtained information of proprietary interest holders from the State of New South Wales (State) to facilitate notice under s 66(3)(a)(iv). I have had regard to this information, as required by s 190A(3)(b).

[7] I note that the information received by the Registrar does not purport to identify areas where native title has been extinguished. Additionally, although the names and addresses of proprietary interest holders are found within the information, together with lot/plan and cadastral references for some of the interest holders, there has been no analysis as to the location of these areas within the outer boundaries, either by the State or by members of the staff assisting the Tribunal. In my view, this information is in a 'raw' state and is not currently adverse to the applicant under any of the other test conditions. Accordingly, I have not provided it to the applicant.

Subsection 190A(3)(c): Information supplied by Commonwealth/State

[8] I note that there is no information before me of the kind identified in s 190A(3)(c) (information supplied by the Commonwealth or State of New South Wales).

Section 190A(3): other information to which Registrar considers it appropriate to have regard

[9] I have also considered information from the following additional sources:

- (a) an overlaps analysis and geospatial assessment by the Tribunal's Geospatial Services dated 2 September 2013
- (b) searches I made for the entries of two previously registered native title claims on the Register of Native Title Claims that overlap the current application
- (c) maps of the Hunter Valley region in which the application area is located, including two maps prepared by Geospatial Services in February 2014.

[10] I explain the relevance of this additional information in my reasons below for the conditions outlined in s 190B(2) (identification of area subject to native title), s 190C(3) (no previous overlapping claim groups) and s 190B(5) (factual basis for claimed native title).

[11] NTSCORP Limited (NTSCORP) and the legal representative for the Gomeroi applicant each asked for an opportunity to provide me with information in relation to the conditions of the registration test.

[12] The Gomeroi applicant wished me to consider a submission pertaining to an expert research opinion relevant to the factual basis for the claim. In my view, it is not appropriate to have regard to information pertaining to the factual basis from a competing claim group such as

the Gomeroi People. In this regard, I refer to the decision by Mansfield J in *Northern Territory v Doepel* (2003) 133 FCR 112; (2003) 203 ALR 385 [2003] FCA 1384 (*NT v Doepel*) that:

- (a) the Registrar must accept the truth of the asserted factual basis (at [17]), and
- (b) it is not the Registrar's task to 'note the inconsistency of information in different documents, and so simply not be satisfied of the accuracy of the information in the application' (at [47]).

[13] NTSCORP wished me to consider information that goes to the procedural conditions of ss 190C(3) and 190C(4). I note that NTSCORP is a body funded under s 203FE to perform the functions of a representative Aboriginal/Torres Strait Islander body (RATSIB) for New South Wales. I was concerned not to add to the Registrar's workload by taking receipt of information from NTSCORP, giving the applicant an opportunity to comment and then considering what each party has to say in relation to the conditions of s 190C, when my decision is that in any event, the claim does not satisfy the merit conditions of s 190B.

[14] I have also considered that s 190A(3) does not stipulate that a competing claim group or a RATSIB is a mandatory source of information when considering a claim for registration under s 190A. In my view, the exclusion under s 190A(3) of information from these persons as a mandatory source, may indicate Parliament's intention that the registration test decision-making process is not adversarial. Nor is it the forum to raise substantive disputes about matters such as the authority of the applicant or the factual basis for the claimed native title. In other words, the merits of one claim as against another, or questions raised about authorisation, are matters for the Federal Court managing and hearing the proceedings that underlie the claim.

[15] Further, it is also relevant to the proper construction of s 190A(3) that there are other, apparently more appropriate, ways to raise these issues and have them determined.³

[16] For example, if a RATSIB believes an application is not properly authorised, it has a right to be joined to the proceedings during the notification period (or at anytime, in most cases) and then seek strikeout under s 84C. Alternatively, it can seek an order under s 84D(1). Members of the claim group may also seek an order under s 84D(1) if they are of the view that the applicant is not duly authorised. If there are overlapping competing claims, s 67 appears to be the avenue provided for dealing with that issue, not the registration test.

³ With the caveats that (a) whether or not the applicant is, in fact, authorised cannot be determined by the court until it is determined that there are persons holding the particular native title claimed (see *Harrington-Smith v Western Australia (No 9)* [2007] FCA 31, [1186]- [1193], [1216], Lindgren J) and (b) some judges are of the view that even the court is not empowered to determine who is, or is not, a member of the native title claim group: *Aplin on behalf of the Waanyi Peoples v Queensland* [2010] FCA 625, [260], [267]-[268], [270]; *Graham on behalf of the Ngadju People v Western Australia* [2012] FCA 1455, [13], Marshall J; *A.D. (deceased) on behalf of the Mirning People State of Western Australia (No 2)* [2013] FCA 1000, [66]-[75], McKerracher J.

Procedural fairness to the applicant

[17] To avoid a perception that my communications with NTSCORP about its information and the Gomeroi information may have influenced my decision, I have not looked at the information these persons have asked me to consider. I have made my decision that the claim does not satisfy all of the conditions of the registration test on the basis solely on the information outlined above, as is set out in the reasons that follow.

[18] On 22 January 2014, a member of the staff assisting the Tribunal provided the applicant with copies of, and an opportunity to comment in relation to, correspondence⁴ between me, the Tribunal and NTSCORP concerning the request that I consider submissions/information.

[19] Although I did not look at the information and submissions to which these two persons wished me to have regard, I took this step to be procedurally fair to the applicant. It seemed to me that the applicant was entitled to know that both NTSCORP and the Gomeroi applicant wished me to consider adverse information and be offered an opportunity to comment or respond before my decision. The applicant informed the Tribunal on 24 January 2014 that it did not wish to comment given that I did not propose to have regard to any such information/submissions.

Section 190B: conditions about merits of the claim

[20] Section 190B(1) provides that '[t]his section contains the conditions mentioned in subparagraph 190A(6)(b)(i).'

190B(2) Identification of area subject to native title

[21] The claim **satisfies** the condition of s 190B(2).

[22] Section 190B(2) provides that '[t]he Registrar must be satisfied that the information and map contained in the application as required by paragraphs 62(2)(a) and (b) are sufficient for it to be said with reasonable certainty whether native title rights and interests are claimed in relation to particular land or waters.'

[23] The information required by s 62(2)(a) is 'information, whether by physical description or otherwise that enables the boundaries of:

(a) the area covered by the application; and

(b) any areas within those boundaries that are not covered by the application;

⁴ These communications comprised my letter to NTSCORP dated 15 November 2013, the response by NTSCORP dated 12 December 2013 and an email from a senior solicitor at NTSCORP dated 21 November 2013 concerning a submission that the legal representative for the Gomeroi People wished me to consider.

to be identified.'

[24] The information required by s 62(2)(b) is 'a map showing the boundaries of the area mentioned subparagraph [62](a)(i).'

Outer boundaries: ss 62(2)(a)(i) and (b)

[25] In this case, the outer boundaries encompass a large area of land and waters in the Hunter Valley region of New South Wales (approximately 11,351 sq km). Attachment B1 of the application contains a metes and bounds description of the boundaries, which references the Hunter River catchment boundary, major roads, waterways, intersecting cadastral boundaries and the spur and ridge top lines of certain mountains or other geographic features, together with geographic coordinates along the boundary. The written description references GDA94 to six decimal places. The map in Attachment C depicts the boundaries with a bold line over a topographic background image. The map contains a Scalebar, Northpoint, coordinate grid and notes relating to source, currency and datum of data used to prepare the map.

[26] The Tribunal's Geospatial Services (Geospatial) prepared the written description and map of the outer boundaries pursuant to a request for assistance under s 78 from the applicant. Geospatial have undertaken a compliance check dated 2 September 2013 which has identified a minor error on pg 2, line 9 of Attachment B1: '...150.583610° East; then generally **easterly** along that centreline...' should read '...150.583610° East; then generally **westerly** along that centreline...'. In my view, this is clearly a typographical error. Further, a minor error of this nature does not affect the overall certainty of the information provided in relation to the outer boundaries, in light of the otherwise comprehensive materials provided in the application to identify it on the surface of the Earth. I note also that the map clarifies the error within the written description by generally showing the westerly direction along which this section of the boundary travels.

[27] I am of the view that the information within Attachments B1 and C is clear, comprehensive and detailed. The information provides the degree of reasonable certainty in relation to the outer boundaries of the area covered by the application. I have relied on the following matters to reach this view:

- (a) The map provides a clear delineation of the outer boundaries, supported by a Scalebar, Northpoint, location diagram and coordinate grid with notes relating to the source, currency and datum of data used to prepare the map.
- (b) The written description uses a comprehensive mix of clearly described data, such as metes and bounds, identification of major roads, waterways, coupled with geographic coordinates, cadastral boundaries and topographic features to locate the outer boundaries on the earth's surface.

- (c) The map clearly depicts the features used in Attachment B1 to describe the outer boundaries and is supported by a coordinate grid. The boundary line is clearly marked on the map.

Areas within those boundaries that are not covered by the application (internal excluded areas): s 62(2)(a)(ii)

Exclusion of areas covered by previous native title determination applications

[28] I note that ss 62(2)(a) and (b), when read together, provide that the application need only contain a map of the outer boundaries and not the internal excluded areas. Having said this, it might be that a map showing the boundaries of internal excluded areas is required for the purposes of the merit condition of s 190B(2) in some cases, if such information would assist to show 'whether native title rights and interests are claimed in relation to particular land or waters'. I have reached the view that a map is not required in relation to the internal excluded areas identified in this application. (I explain this below.)

[29] Para 6 of Attachment B2 states that the areas covered by the NSD1093/2012, NSD1169/2012 and NSD788/2013 and NSD781/2013 native title determination applications are not covered by the application. (These four native title determination applications were made in response to s 29 mining notices in relation to land at Jerrys Plains and Neath respectively.) In my view, the details provided are sufficient for it to be said with reasonable certainty that native title rights and interests are not claimed in relation to these particular areas, having regard to the information contained in the application, which identifies the areas covered by the four named native title determination applications.

Exclusion by generic formula of areas affected by 'PEPAs' or where native title otherwise wholly extinguished

[30] The application contains a written description of the areas within the outer boundaries not covered by the application: see paras 2, 3(a), 4 and 5 of Attachment B2. Attachment B2 uses a generic exclusion that uses the terminology of s 23B of the Act (with one exception discussed below). Section 23B defines 'previous exclusive possession acts' (PEPAs). Attachment B2 states that the exclusion of PEPAs is subject to those parts of s 23B, which provide that certain acts are not a PEPA, and the application of the non-extinguishment principle defined in s 238, including any area to which ss 47, 47A or 47B applies.

[31] The one exception is the exclusion in para 2(g) which mistakenly refers to 'a lease dissected from a mining lease as referred to in s238(2)(vii)'. Section 23B(2)(vii) refers to leases dissected from a mining lease and to 245(3) as the provision of the Act which deals with these acts. The note at the end of Attachment B2 states that the terms therein have the same meaning as they do in the Act. I am prepared to accept that this is a typographical error which does not affect overall certainty, given that it appears clear the applicant intended to refer to the provisions of s 23B(2)(vii) and s 245(3), which in fact deals with dissected mining leases, rather than s 238.

[32] Para 3(b) of Attachment B2 states that the area covered by the application excludes any area in relation to which native title rights and interests have otherwise been wholly extinguished.

[33] In my view, it would be preferable that the applicant use specific and applicable legislative provisions to define areas excluded because of extinguishment, rather than with the PEPA provisions of s 23B and the 'catch all' found in para 3(b). However, I have decided that the concept of extinguishment is well defined by the Act and the *Native Title (New South Wales) Act 1994* and it is possible, given the early stage of the proceedings, to work out what areas may be affected, particularly when the description of the internal excluded areas is read as a whole.

[34] An issue with which I have grappled is whether a generic description of the internal excluded areas is sufficient in an area such as that encompassed by the outer boundaries of this application. In this regard, my own knowledge is that this is a heavily populated and long settled part of the country. The map in Attachment C identifies many towns, major roads and public infrastructure places within the outer boundaries. The applicant's own factual basis information talks about the impact of land grants after the arrival of the settlers and the establishment of farms to service the colony and the growing population of Sydney; see the following extracts from Annexure A (a document that is annexed to Attachment F1):

3.3 Settlement really began in the early 1820s when the valley was opened for farming. The best agricultural land was granted in a period from 1823–1827 when approximately 25% of the land was converted to freehold title by grant (Robinson & Burley 1962). The initial pattern was for freehold estates to be established along the major tributaries of the Hunter and for the Crown Land in between to be grazed (legally or by squatting). These estates formed the basis for squatting settlement of the Liverpool Plains and New England.

3.4 The alienation of Wonnarua land began when John Howe received an occupation license from Governor Macquarie. Subsequently, Governor Brisbane opened the Hunter River for European settlement in 1822. Aboriginal dependence on the Hunter River for many staples meant that the Wonnarua suffered severely when the Europeans settled on the River and consequently the Wonnarua and other Aboriginal People immediately lost access to water and the raw materials in the river and on the banks (Le Maistre 1996: 9).

3.5 By the mid 1820's, Sydney's maritime economy was sufficiently developed to provide reliable and regular shipping and communications between the Hunter and Sydney. Consequently, from the beginning of European settlement of the Hunter, Wonnarua people faced a more developed and established colonial world than their Aboriginal neighbours faced earlier in Sydney and Coal River ... Capital was available for new areas and land-based ventures supporting extensive farming activities in the Hunter (Le Maistre 1996: 62)

3.6 The growing population of Sydney provided a market for produce, As a result, European settlers rapidly displaced Wonnarua people on the Hunter

The cords [sic] indicate that at first Aboriginal people fought literally to be able to continue some of their life habits and resorted to predatory behaviour to protect access to waters and

food, thereby disregarding Macquarie's new legal framework for the first generation (Le Maistre 1996: 62)

3.11 What impacted on the Wonnarua was what happened to their lands. Major clearing in the region occurred after the land was subdivided in the late 1870s. The Great Northern Railway reached Muswellbrook in 1869 increasing the numbers of people moving through the Hunter Valley. . .

3.13 During the 1950s and 1960s, the districts [sic] economic activities were based on, dairying, beef cattle, vegetable and fodder farming and use of the Army Base for National Service Training. The post war demand for electric power, and the development of open cut methods for mining coal resulted in the exploitation of the large deposits of steaming coal found close to the surface of the Singleton area. Construction of the Liddell Power Station commenced in 1969 and from the mid-seventies more than ten major open cut coal mines have commenced operation. Bayswater Power Station began construction in 1981 and was in full production by 1985 (HLA: Envirosiences 2007: 17).

3.14 The impact of the establishment of these estates on the environment was initially comparatively minor as there were largely grazing sheep and cattle, and cropping was found lower down the Hunter Valley on the flats near Maitland. There was, however, some impact from the construction of infrastructure such as fences, houses and farm buildings and small gardens to supply farm workers (HLA: Envirosiences 2007: 17).

[35] I note that Nicholson J in *Daniels for the Ngaluma People & Monadee for the Injibandi People v Western Australia* [1999] FCA 686 (*Daniels*) was satisfied that a generic description of internal excluded areas met the provisions of s 6(2)(a). Lindgren J made a similar decision at [8] of *Harrington-Smith on behalf of the Wongatha People v Western Australia (No 5)* (2003) 197 ALR 138; [2003] FCA 218 (*Harrington-Smith No 5*). I have some concern that both cases may be capable of being distinguished here, as they were concerned with relatively unpopulated and lightly settled areas of Western Australia, when compared to the Hunter Valley region that this application occupies.

[36] I note also that both *Daniels* and *Harrington-Smith No 5* considered whether a general description of internal excluded areas met s 62(2)(a)(ii), not s 190B(2). Section 190B(2) may impose a more onerous standard of 'reasonable certainty' so that the 'particular land or waters where native title rights and interests are claimed' are capable of being ascertained. However, there are indications in Nicholson J's reasons that a generic exclusion could meet the test at s 190B(2), particularly where the proceedings are at an early stage and the applicant is not in possession of the facts relating to extinguishment to more particularly delineate the internal excluded areas. Nicholson J noted the interaction between:

(a) s 62(2)(a) which requires information about the boundaries and areas covered/not covered by the application to 'be approached with attention to "detail"'

- (b) s 190B(2), which requires an assessment by the Registrar of whether that detail is sufficient for it to be said where the native title rights and interests are claimed within the outer boundaries

and went on to find at [32] of *Daniels*:

These requirements are to be applied to the state of knowledge of an applicant as it could be expected to be at the time the application or amendment to an application is made.

Consequently a class or formula approach could satisfy the requirements of the paragraphs where it was the appropriate specification of detail in those circumstances. For example, at the time of an initial application when the applicants had no tenure information it may be a satisfactory compliance with the statutory requirement.

[37] I note that French J agreed with the decision in *Daniels* in the context of the Registrar's assessment of a generic description of internal excluded areas against the requirements of s 190B(2): see *Strickland v Native Title Registrar* (1999) 168 ALR 242; [1999] FCA 1530 at [51] to [52].

[38] In light of these decisions, it seems to me that at some point the applicant, when in possession of the relevant information, will need to provide specific and detailed information about the particular areas within the outer boundaries in fact covered by the application. It may be that this point will arise following analysis by the parties of the data that the Registrar has obtained from the State in relation to current proprietary interest holders. This is a separate requirement to that found in s 190B(2) and appears to arise under the obligation imposed that the application contain the details required by:

- (a) ss 62(2)(a)(ii): information, whether by physical description or otherwise, that enables the boundaries of any areas within [the outer] boundaries not covered by the application
- (b) ss 62(2)(c): the details and results of all searches carried out by or on behalf of the native title claim group to determine the existence of any non-native title rights and interests in relation to land or waters in the area covered by the application
- (c) ss 62(2)(d): a description of the native title rights and interests claimed in relation to particular land or waters (including any activities in exercise of those rights and interests) but not merely consisting of a statement to the effect that the native title rights and interests are all native title rights and interests that may exist, or have not been extinguished, at law.

[39] I have decided that the description of the internal excluded areas by way of a formula based on s 23B and a generic exclusion of any other area where native title has been wholly extinguished is sufficient at this point of the proceedings. My decision relies on the fact that the proceedings are new and the statement by the applicant in Schedule D that it has not undertaken

any searches of non-native title rights and interests. It seems that the applicant does not yet have access to tenure information, which would enable it to seek advice, and thus identify with greater detail the particular areas where native title rights and interests are in fact claimed, noting the extinguishment provisions of the Act.

190B(3) Identification of native title claim groups

[40] The claim **satisfies** the condition of s 190B(3).

[41] Section 190B(3) provides that:

The Registrar must be satisfied that:

- (a) the persons in the native title claim group are named in the application; or
- (b) the persons in that group are described sufficiently clearly so that it can be ascertained whether any particular person is in that group.

Information considered

[42] The application does not name the persons in the native title claim group; rather it provides a description in Schedule A, such that it is necessary to consider the claim against the requirements of s 109A(3)(b).

[43] The description in Schedule A states that the persons on whose behalf the application is made (the native title claim group) are the biological descendants of two apical ancestors, Emily (born approximately 1840) and Mary Shoe (born approximately 1800 in the Singleton district). The description in Schedule A provides the names of and biographical information for, a child born to each ancestor (Henry Frederick Taggart and Matilda Hughes respectively).

[44] I note that para 1 of Attachment F contains the statement that '[t]he native title claim group identifies itself as the Plains Clans of the Wonnarua People ("PCWP")'.

Consideration

[45] The statement in Attachment F may be indicative of a self-identification by a group of persons as a 'native title claim group'. I refer to the finding of O'Loughlin J at [60] of *Risk v National Native Title Tribunal* [2000] FCA 1589 that '[a] native title claim group is not established or recognised merely because a group of people (of whatever number) call themselves a native title claim group.'

[46] However, the law has now been clarified so that, in my view, it is not a relevant consideration under s 190B(3) that the application correctly describes the native title claim group. Its focus is 'upon the adequacy of the description so that the members of any particular person in the identified native title claim group can be ascertained'. It does not 'require any examination of whether all the named or described persons do in fact qualify as members of the native title claim group': see Mansfield J at [37] of *NT v Doepel*. I refer also to the finding by Dowsett J in *Gudjala*

People # 2 v Native Title Registrar [2007] FCA 1167 (*Gudjala 2007*) that the condition of s 190B(3) only requires that the members of the claim group be identified or described sufficiently. It does not require that there be a ‘cogent explanation of the basis upon which they qualify for such identification’ — *Gudjala 2007* at [33].

[47] Having regard to *NT v Doepel* and *Gudjala 2007*, it is my view that s 190B(3) is not the place to examine the correctness of the description of the persons in the native title claim group; all that is required is that the description provides the clarity required by s 190B(3). In my view, a description which relies on biological descent from named ancestors is an acceptable mechanism and provides the requisite clarity — see Carr J at [63] to [69] of *Western Australia v Native Title Registrar* (1999) 95 FCR 93; [1999] FCA 1591.

190B(4) Native title rights and interests identifiable

[48] The claim **satisfies** the condition of s 190B(4).

[49] Section 190B(4) provides that ‘[t]he Registrar must be satisfied that the description contained in the application as required by s 62(2)(d) is sufficient to allow the native title rights and interests claimed to be readily identified.’

[50] Section 62(2)(d) provides that the application contain ‘a description of the native title rights and interests claimed in relation to particular land or waters (including any activities in exercise of those rights and interests), but not merely consisting of a statement to the effect that the native title rights and interests are all native title rights and interests that may exist, or that have not been extinguished’ (underlining added).

Information considered

[51] The application provides a description of the claimed native title rights and interests in Schedule E. The applicant claims the ‘right to possess occupy, use and enjoy the land and waters of the application area against the whole world, pursuant to the traditional laws and customs of the claim group’ over areas where such a claim can be recognised, namely, where there has been no extinguishment of native title or where ss 47, 47A and 47B apply.

[52] Over areas where the exclusive rights cannot be recognised, the applicant claims a series of ‘non-exclusive’ rights (such as rights of access, to camp, to erect shelters, to live there and to hunt and fish). Schedule E states that the rights are subject to the laws of the States of New South Wales and the Commonwealth of Australia, rights conferred pursuant to those laws and the traditional laws acknowledged and the traditional customs observed by the native title claim group.

Consideration

[53] I am of the view that s 190B(4) requires a clear and easily understood description of the native title rights and interests: see *NT v Doepel* at [91] to [92], [95], [98] to [101] and [123]. In my

view, the description in this case of the claimed rights and interests is clear, understandable and sufficient to allow the native title rights and interests claimed to be readily identified.

190B(5) Factual basis for claimed native title

[54] The claim **does not satisfy** the condition of s 190B(5).

[55] Section 190B(5) provides that:

The Registrar must be satisfied that the factual basis on which it is asserted that the native title rights and interests claimed exist is sufficient to support the assertion. In particular, the factual basis must support the following assertions:

- (a) that the native title claim group have, and the predecessors of those persons had, an association with the area; and
- (b) that there exist traditional laws acknowledged by, and traditional customs observed by, the native title claim group that give rise to the claim to native title rights and interest; and
- (c) that the native title claim group have continued to hold the native title in accordance with those traditional laws and customs.

Information considered

[56] I have considered the following information contained in the application:

- (a) *Attachment F*: this document contains a summary of the general description of the factual basis for the assertions of s 190B(5) (Attachment F). Attachment F refers to a number of other attachments, now listed.
- (b) *Attachment F1*: this is a copy of an affidavit by Scott McCain Franks⁵ dated 13 May 2013 (Attachment F1), which was contained in an earlier Plains Clans of the Wonnarua People native title determination application, NSD788/2013, over land at Neath, in response to a s 29 mining notice (Neath claim). Neath is located within the outer or perimeter boundary, close to a point along the south-eastern boundary.
- (c) *Annexure A to Mr Franks' Attachment F1 affidavit*: this is a description of the factual basis for two earlier claims by the native title claim group (Annexure A). Annexure A was contained in the native title determination application for the Neath claim and also contained in another claim by the claim group in response to a s 29 mining notice, found in native title determination application NSD1093/2012, over land at Jerrys Plains (Jerrys Plains claim). Jerrys Plains is located within the outer or perimeter boundary, along a southern bank of the Hunter River, between Singleton and Denman. I note that Annexure A is extensively referenced in the description of the factual basis for this new claim within Attachment F and would appear to be part of that general description.

⁵ One of the two persons, with Robert John Lester, who comprises the applicant.

- (d) *Annexure B to Mr Franks' Attachment F1 affidavit*: this is a statement by Mr Franks dated 24 August 2012 (Annexure B). This statement was contained in both the Jerry Plains and Neath claims. Mr Franks is a member of the claim group via descent from the first apical ancestor named in Schedule A, Mary Shoe.
- (e) *Annexure C to Mr Franks' Attachment F1 affidavit*: a statement by **Claimant1** dated 12 September 2012 (Annexure C). This statement was contained in was contained in the applications for the Jerry Plains and Neath claims. **Claimant1** is a member of the claim group via descent from Mary Shoe.
- (f) *Annexure D to Mr Franks' Attachment F1 affidavit*: a statement by **Claimant2** dated 12 September 2012 (Annexure D). This statement was contained in the applications for the Jerry Plains and Neath claims. **Claimant2** is a member of the claim group via descent from the second apical ancestor named in Schedule A, Emily.
- (g) *Annexure E to Mr Franks' Attachment F1 affidavit*: this is a drawing showing the Neath area relative to the asserted eastern boundary of the claim group. This document was contained in the application for the Neath claim.
- (h) *Attachment F2*: this is a second affidavit by Mr Franks dated 13 May 2013 (Attachment F2 affidavit), which was contained in the application for the Neath claim.
- (i) *Attachment F3*: this is a third affidavit by Mr Franks dated 21 May 2013 (Attachment F3 affidavit), which was provided separately to the Registrar to support the factual basis for the Neath claim
- (j) *Attachment F4*: this is a new affidavit by Mr Franks dated 14 August 2013 (Attachment F4 affidavit) which addresses the asserted factual basis for areas not covered by the Neath and Jerrys Plains claims. In the Attachment F4 affidavit, Mr Franks attests to the relevance of the information within Attachments F1 to F3 and Annexures A to E listed above to the factual basis for this new claim 'over the broader area of country where the PCWP assert primary rights and interests under our traditional laws and customs.'⁶ (I note that although the areas covered by the Neath and Jerrys Plains claims lie within the outer boundaries, they have been specifically excluded from the area covered by the application: see para 6 of Attachment B2.)

[57] I have also considered the information contained in the application as to the:

⁶ See paras 3 to 5 of the Attachment F4 affidavit by Mr Franks.

- (a) description of the persons in the native title claim group: see Schedule A and my reasons above for the condition of s 190B(3)
- (b) areas covered and not covered by the application: see Attachments B1, B2 and C and my reasons above for the condition of s 190B(2)
- (c) description of the claimed native title rights and interests: see Schedule E and my reasons above for the condition of s 190B(4)
- (d) description of current activities in relation to the area (Schedule G)

[58] To assist me to locate places and features discussed in the factual basis materials, but not readily identifiable from the map in Attachment C, I have looked at and considered at maps that show places in and around the Hunter Valley, including two maps prepared by the Tribunal's geospatial services (Geospatial) in February 2014. The first Geospatial map replicates the map in Attachment C, but provides more precise labels for some places discussed in the material, namely:

- (a) the Liverpool Range, which extends along the northern outer boundary
- (b) the Hunter River from its source in the Barrington Tops to its mouth at Newcastle
- (c) Barrington Tops, which adjoins the outer boundary in the northeast
- (d) the location of the Hunter River catchment boundary (referenced in Attachment B1 and also in Attachment F, as the outer boundary of the territory with which the Wonnarua People are associated in the early historical records)
- (e) Wollombi Brook
- (f) the approximate location of Patricks Plains, as sourced from Geoscience Australia's place name database (feature no. NSW79564).

[59] The second Geospatial map shows the location of certain national parks which lie within the outer boundaries of the area covered by the application.

Legal principles governing my consideration of s 190B(5)

[60] Mansfield J held at [17] of *NT v Doepel* that:

Section 190B(5) is carefully expressed. It requires the Registrar to consider whether the 'factual basis on which it is asserted' that the claimed native title rights and interests exist 'is sufficient to support the assertion'. That requires the Registrar to address the quality of the asserted factual basis for those claimed rights and interests; but only in the sense of ensuring that, if they are true, they can support the existence of those claimed rights and interests. In other

words, the Registrar is required to determine whether the asserted facts can support the claimed conclusions. The role is not to test whether the asserted facts will or may be proved at the hearing, or to assess the strength of the evidence which may ultimately be adduced to establish the asserted facts.

[61] This was approved by a Full Court of the Federal Court (French, Moore and Lindgren JJ) in *Gudjala People No 2 v Native Title Registrar* (2008) 171 FCR 317 [2008] FCAFC 157 at [83] to [85] (*Gudjala FC*).

[62] In considering what was required to meet the condition of s 190B(5), the Full Court in *Gudjala FC* looked at the interaction between ss 62 and 190A, the former mandating the requirements for commencing an application and the latter establishing the registration test. The Full Court held that:

... the statutory scheme appears to proceed on the basis that the application and accompanying affidavit, if they if they, in combination, address fully and comprehensively all the matters specified in s 62, might provide sufficient information to enable the Registrar to be satisfied about all matters referred to in s 190B. This suggests that the quality and nature of the information necessary to satisfy the Registrar will be of the same general quality and nature as the information required to be included in the application and accompanying affidavit — at [90].

[63] The Full Court then dealt with the nature and quality of the information required by s 62, and in particular the details required by s 62(2)(e)⁷ and said:

The fact that the detail specified by s 62(2)(e) is described as “a general description of the factual basis” is an important indicator of the nature and quality of the information required by s 62. In other words, it is only necessary for an applicant to give a general description of the factual basis of the claim and to provide evidence in the affidavit that the applicant believes the statements in that general description are true. Of course the general description must be in sufficient detail to enable a genuine assessment of the application by the Registrar under s 190A and related sections, and be something more than assertions at a high level of generality. But what the applicant is not required to do is to provide anything more than a general description of the factual basis on which the application is based. In particular, the applicant is not required to provide evidence of the type which, if furnished in subsequent proceedings, would be required to prove all matters needed to make out the claim. The applicant is not required to provide evidence that proves directly or by inference the facts necessary to establish the claim — at [92].

[64] The Full Court concluded that it would be wrong to approach the material provided in relation to the factual basis ‘on the basis that it should be evaluated as if it was evidence furnished in support of the claim’ — *Gudjala FC* at [93].

⁷ I note that the matters referred to in s 62(2)(e)(i), (ii) and (iii) are worded almost identically to s 190B(5).

[65] Following *NT v Doepel* and *Gudjala FC*, I do not evaluate the applicant's asserted factual basis as if it were evidence furnished in support of the claim, nor do I criticise or refuse to accept what is stated in the factual basis materials, apart from its sufficiency overall to address the relevant matters in s 190B(5). My assessment of the material is limited to whether the asserted facts can support the assertions set out in s 190B(5). I am also of the view, given the relatively narrow scope of this condition, as explained by Mansfield J in *NT v Doepel* and their Honours in *Gudjala FC*, that it would be wrong for me to have regard to unsolicited information from the Gomeroi People,⁸ which seeks to impugn the asserted factual basis. I refer to my introductory comments setting out my reasons for not looking at information from a competing claimant such as the Gomeroi People.

[66] Finally in relation to the relevant legal principles, in *NT v Doepel*, Mansfield J approved the Registrar's approach to s 190B(5) which analysed 'the information available to address, and make findings about, the particular matters to which s 190B(5) refers' — at [130] of *NT v Doepel*. Mansfield J concluded at [132] that it is correct for the Registrar to focus primarily upon the particular requirements of ss 190B(5)(a) to (c), as 'this is the way in which the NTA directs [her] attention.' His Honour found that, '[i]f any of the particular requirements were not met, then the general requirement would not be met'.

[67] Having regard to this, I focus on the particular requirements of ss 190B(5)(a)-(c) in coming to a decision that I am not satisfied that the factual basis on which it is asserted that the native title rights and interests claimed exist is sufficient to support the assertion.

Section 190B(5)(a): relevant legal principles

[68] The factual basis must be sufficient to support an assertion that 'the native title claim group have, and the predecessors of those persons had, an association with the area.'

[69] In *Martin v Native Title Registrar* [2001] FCA 16 (*Martin*), French J agreed with the delegate's assessment that the factual basis was not sufficient for the assertion in s 190B(5)(a), in relation to current association by the native title claim group with the area, because:

- (a) although there was a factual basis for an association with particular areas concentrated around the centre of the claim area,
- (b) the factual basis did not disclose more than brief references to some of the outlying areas covered by the claim and contained no information regarding association with some coastal areas and with the northern and eastern parts of the claim — *Martin* at [24].

⁸ The Gomeroi People have a registered native title claim which overlaps the area covered by this application in its north western reaches.

[70] Justice French held the delegate did not err in his approach to s 190B(5)(a) as he:

... looked to the positive material put before him asserting a factual basis for association and found that it disclosed association only with particular areas. If it be the fact that that material disclosed only physical association, that does not mean that he has wrongly construed the nature of the association that may be sufficient for the purpose of the recognition of native title. There was simply a lack of material to support an association, physical or spiritual, with the entire area claimed. He was not obliged to accept the very broad statements contained in Schedule F which have no geographical particularity — at [26] (underlining added).

[71] In *Corunna v Native Title Registrar* [2013] FCA 372 (*Corunna*), Siopis J held that the Tribunal (on reconsideration of a claim under s 190E) did not err under s 190B(5)(a). Siopis J found ‘the appropriate test was whether the material provided demonstrated a factual basis sufficient to support the assertion that the native title claim group have, and their predecessors had, an association over the whole area⁹ of the claim’ — at [31]. Siopis J also cited *Gudjala FC* for the proposition that the condition of s 190B(5) requires the Registrar to be satisfied that the materials are in sufficient detail to permit a genuine assessment of the application and that they are something more than assertions at a high level of generality — *Corunna* at [45]. Siopis J agreed with the reconsidering Tribunal member that the material provided in relation to part of the claim area was ‘at a high level of generality and, significantly, lacked geographic particularity in relation to the boundaries of the sea portion of the claim west of Rottnest Island’ — *Corunna* at [45].

[72] Siopis J said at [37] of *Corunna* that [52] of *Gudjala 2007* (discussed at [75] below) dealt with ‘whether all members of the claim group have, and their predecessors had, a continuing association with the claim area, or whether the claim group included some persons who did not’¹⁰. This, in the view of Siopis J, is a different issue to that in *Martin* and *Corunna*, which concerned ‘whether the material provided a factual basis sufficient to support the asserted physical and spiritual association by the claim group with the entire area of the claim’¹¹ — *Corunna* at [39].

[73] Having regard to *Martin* and *Corunna*, I am of the view that the factual basis must be sufficient to support an assertion that the native title claim group have, and the predecessors of those persons had, an association with the entire area of land and waters covered by the application. Having said this, I understand that it is not appropriate to undertake a forensic analysis of the material; it is about the sufficiency of the material overall to provide the factual basis required in relation to an association by the native title claim group and the predecessors of those persons with the area covered by the application.

⁹ Underlining added.

¹⁰ Underlining added.

¹¹ Underlining added.

[74] Having regard to [52] of *Gudjala 2007*, I am of the view that s 190B(5)(a) requires a factual basis sufficient to support an assertion that there is an association:

- (a) 'between the whole group and the area'
- (b) 'between the predecessors of the whole group and the area over the period since sovereignty',
- (c) although it is 'not necessary that all members must have such association at all times'.¹²

[75] In my view, assuming the factual basis supports the assertion of an association around the time of European contact and sustained settlement, this will allow an inference that the factual basis supports an assertion of an association back to sovereignty: see comments by the Full Court at [96] of *Gudjala FC*.

Section 19B(5)(a): Consideration

Areas covered by the application

[76] The following are some general observations I have about the area covered by the application noting that it is the area which the factual basis materials in relation to association must address.

[77] The application covers land and waters in the Hunter Valley of New South Wales. According to the information in Attachments B1 and C:

- (a) the eastern outer boundary of the area generally follows the course of the Patterson River from its headwaters in the north to its intersection with the Hunter River around Maitland in the south
- (b) the western outer boundary commences at an intersection of Mogo Creek and MacDonald River in the Hunter Range and Judge Dowlings Range and follows a northerly direction along that river and other waterways, including Martindale Creek, Baerimi Creek, Goulburn River and Worondi Rivulet to its headwaters in the Liverpool Range
- (c) Maitland (or part of it), Cessnock, Singleton, Jerrys Plains, Denman, Sandy Hollow, Muswellbrook, Scone, Mount Olive, St Clair, Falbrook, Broke and Bulga all fall within the outer boundaries.

[78] The Hunter River traverses the area encompassed by the outer boundaries from Maitland in the southeast then west through Singleton and Jerrys Plains to Denman and then northeast,

¹² This analysis was not disapproved on review by the Full Court—see *Gudjala FC* at [69].

through Muswellbrook and Aberdeen. The outer boundaries do not encompass the headwaters of the Hunter, which lie in Barrington Tops. I have looked at another map prepared by Geospatial (13/02/14) that depicts the location of the Hunter River in relation to the outer boundaries and the proximate location of the Hunter River catchment boundary in relation to the outer boundaries (first Geospatial map). I have looked at a second Geospatial map (undated) that shows the location of national park land within the outer boundaries (second Geospatial map). I have looked at three maps derived Google maps, to show the location of Bulga relative to the Putty Road, the MacDonald River relative to Howes Valley and Bridgman relative to Singleton. I have also looked at a map from the NSW Department of Environment of the entire Hunter River catchment. I have looked at these maps to understand the location of places discussed in the factual basis materials.

[79] Although the application boundary encompasses a large area of approximately 11, 351 sq km, the application excludes areas inside the boundaries where native title has been extinguished by PEPAs (see s 23B) or is otherwise wholly extinguished. The application also excludes the areas covered by the Jerrys Plains and Neath claims.¹³ I refer to my reasons above for s 190B(2) that the extent of extinguishment is likely to be substantial. Accordingly, the areas within the outer boundaries in fact covered by the application is likely to be much less than that shown on the map in Attachment C, given that the Hunter Valley is a long-settled and heavily populated area of New South Wales.

[80] The second Geospatial map, which shows national park land within the outer boundaries, indicates that these are found predominantly in the mountainous regions, which lie along the south-western and western boundaries, and also in the north. They include Yengo National Park in the southwest, Wollemi National Park in the west and Barrington Tops National Park in the northeast. It seems that, given the relative isolation of these areas from the towns and farming lands lower in the valley and their status as national parks, these are areas where native title may not have been extinguished.

[81] I note that these are general observations only and do not represent a decision or findings about extinguishment in relation to any of the area. I note that the fact of extinguishment (or otherwise) over areas within the outer boundaries is not a part of my consideration in relation to this condition.

Identity of the predecessors of the native title claim group

[82] Para 1 of Attachment F states that the native title claim group identifies itself as the Plains Clans of the Wonnarua People (PCWP). Schedule A states that the persons in the native title claim

¹³ I note the statement in para 6 of Attachment B which excludes the areas covered by two other applications, NSD1169/2012 and NSD781/2013. These applications, by the Wonnarua Traditional Custodians native title claim group, were also made in response to the s 29 mining notices over the same areas as that covered by the Neath and Jerrys Plains applications.

group are the biological descendants of two apical ancestors: Emily (and her son, Henry Taggart) and Mary Shoe (and her daughter, Matilda Hughes).

[83] Para 3 of Attachment F states that 'the PCWP and their ancestors were able to stay on or close to the territory of their forebears at and around the Hunter River and the broader Singleton (Patricks Plains) region'. Para 5 of Attachment F states that these four predecessors 'have a documented association with the Hunter River catchment and the broader Singleton (Patrick Plains) region from about the mid 1800s'. Para 5 states that:

- (a) 'The PCWP (the descendants of Mary Shoe and Emily) identify as the Aboriginal descendants of the Wonnarua People who occupied a tract of country that encompassed the middle reaches of the Hunter River and its tributaries around Singleton (Patricks Plains).'
- (b) '[They] are the Aboriginal people who speak for that country today and have the right to use its resources'
- (c) 'They inherited a wide range of laws and customs about its walking tracks, ceremonial places, stories and how to hunt and gather there, which have been continually practiced there over the generations since settlement.'
- (d) 'The PCWP have continuously maintained their association with the application area since settlement and have retained a connection to this area through their acknowledgement and observance of traditional laws and customs.'

[84] In my view, these assertions about the association of the group's predecessors with the area:

- (a) are at a 'high level of generality'
- (b) do not provide 'sufficient detail' in relation to the entire area over which native title rights and interests are claimed
- (c) do not permit a genuine assessment of the claim against the requirements of s 190B(5)(a): see [92] of *Gudjala 2008*, followed by Siopis J at [45] of *Corunna*.

[85] I note that these assertions from Attachment F refer the Registrar, in a general sense, to the information found in Attachments F1 to F4 and I have turned my mind to those attachments when considering the claim against this condition.

[86] I note also that para 2 of Attachment F provides a summary of the details contained in Attachment A about the association of the 'Wonnarua People and of local groups of Wonnarua People' with a tract of country described as 'the Hunter River Catchment and the broader Singleton (Patrick Plains) area' in the early historical record, and in ethnographic writings.

However, it is clear that it is asserted that the Wonnarua People is a wider regional Indigenous society that occupies the region within which this application area also falls: see para (b), pg 1 and paras 3, 5, 6 and 9 of Attachment F and paras 1.1 to 1.5 and paras 4.2 to 4.7 of Annexure A. In my view, the claim is that the Plains Clans of the Wonnarua People native title claim group derive the particular native title rights and interests described in this application from the acknowledgement and observance of the traditional laws and customs of a wider Wonnarua People normative system.

[87] Subject to a reservation expressed below noting that the southern boundary appears to fall outside the Hunter River catchment boundary, I might accept that the factual basis is sufficient to support an assertion that the Wonnarua People had an association with the application area at and before settlement. However, given the identification of the native title claim group as the 'Plains Clans of the Wonnarua People', it is my view that the information must be sufficient to support an assertion that the predecessors of that particular native title claim group were associated with the area.

[88] In this regard, I refer to the following passages from Dowsett J's decision in *Gudjala 2007*:

Subsection 190B(5) of the Act refers to the factual basis upon which it is asserted that the claimed Native Title rights and interests exist. This is clearly a reference to the existence of rights vested in the claim group. Thus it was necessary that the Delegate be satisfied that there was an alleged factual basis sufficient to support the assertion that the claim group was entitled to the claimed Native Title rights and interests. In other words, it was necessary that the alleged facts support the claim that the identified claim group (and not some other group) held the identified rights and interests (and not some other rights and interests)—at [39]. The Delegate experienced difficulty in addressing this question, given his lack of satisfaction as to the adequacy of the description of the claim group. My view of the identity of the claim group relieves me of part of that difficulty. However the absence of any description of the basis upon which the apical ancestors were selected re-emerges in considering this aspect of the case. There may be many ways in which to describe a claim group, any one of which may be sufficient to satisfy the requirements of subs 190B(3). However that task is undertaken, it will eventually be necessary to address the relationship which all members claim to have in common in connection with the relevant land—at [40].

In some cases it will be convenient to describe the claim group by referring to particular people, either by name or, as in this case, by reference to apical ancestors. In other cases, it may be done by describing the relevant requirements of law and custom which must be satisfied in order that a particular person share in the claimed rights and interests. Identification of the claim group, the claimed rights and interests and the relationship between the two are not totally independent processes. The identified rights and interests must belong to the identified claim group. Subsection 190B(5) requires a description of the alleged factual basis which demonstrates that relationship. The applicant may not have been obliged to identify the relationship between the claim group and the relevant land and waters in describing the claim

group for the purposes of subs 190B(3), but that step had to be undertaken for the purposes of subs 190B(5)—at [41].¹⁴

[89] Although sovereignty for the area is 1788, the application says that sustained European contact between the new sovereign order and the relevant Indigenous peoples, who occupied the Hunter Valley area, began some three decades later, in the early 1820s. The facts pertaining to settlement are contained in paras 1.3, 3.1 to 3.14 and 14.1 to 14.7 of Annexure A, which discusses ‘Contact history’ and the ‘Impact of settlement’. Thus, one of the group’s predecessors, Emily, was born approximately two decades after, in approximately 1840, and the other, Mary Shoe, was alive before settlement, having been born in approximately 1800.

[90] There is little to no specific information about the association of Emily and Mary Shoe with the area, apart from general assertions to this effect. However, the application does contain information from the living descendants of each ancestor which tends, in my view, to support an inference that Emily and Mary Shoe were Aboriginal persons:

- (a) who were either born in the Hunter Valley or spent their lives there and who were part of an indigenous group or community
- (b) who were in turn descended from those Aboriginal people understood to have belonged to the Hunter River area, north of the mountains from Windsor traversed by the Howe expeditions of 1819 and 1820,¹⁵ namely, the Wonnarua People.

[91] The information I have reviewed is to the effect that, in the generations following Emily and Mary Shoe, there has been a passing down of an understanding of their Wonnarua identity to current members of the native title claim group. The information shows that this understanding has been productive of an association in the generations following Emily and Mary Shoe, which has a physical and spiritual dimension, with some of the places encompassed by the application. It appears that the association by those in the generations after Emily and Mary Shoe was facilitated by living or spending time along or proximate to the Hunter River, particularly around Singleton and tributaries to the north and south thereof.

[92] Indeed, para 5 of Attachment F makes it clear, in my view, that the asserted association by the group’s predecessors in the period after European settlement relates to the ‘middle reaches of the Hunter River and its tributaries around Singleton (Patricks Plains)’. There is also this from para 14.5 of Annexure A: ‘[t]he apical ancestors of the claim group and their descendants continued to live in and around the Singleton area and continue to do so today.’

¹⁴ I note that this analysis was not disapproved on review by the Full Court—see *Gudjala FC* at [68].

¹⁵ The footnote at the end of pg 1 of Attachment F identifies that this was probably the point of first contact between the exploring settlers and the Indigenous peoples of the Hunter River around the present day sites of Jerrys Plains and Singleton.

[93] I have formed the view that the factual basis is not sufficient to support an assertion that either Emily or Mary Shoe, or their children named in Schedule A (Emily's son Henry Taggart and Mary Shoe's daughter, Matilda Hughes), had an association with the entire area covered by the application. As I will endeavour to illustrate, it is my view that the factual basis only supports that the predecessors had an association with some of the area covered by the application.

Emily

[94] *Claimant2* statement dated 12 September 2012 in Annexure D and para 3.10 of Annexure A contains information pertaining to Emily and her son Henry Taggart.

[95] Schedule A indicates that Emily was born in approximately 1840 and her son Henry was born in 1859 in Howes Valley, Broke. Para 3.10 of Annexure A states that:

- (a) Emily is the Aboriginal progenitor of the Taggart family and working as a domestic servant when she conceived Henry Taggart
- (b) in 1853¹⁶ Mr Cobcroft took Henry in as a baby because Emily could not keep her job and her baby.

[96] *Claimant2* was *age* when she made her statement dated 12 September 2012. She states in para 1 that she has lived in Singleton all her life, the eldest daughter of *parents*. *Claimant2* has *children* and *grandchildren*.

[97] *Claimant2* states in para 2 that she is a 'proud Wonnarua woman and claim my Aboriginal heritage through my maternal family line Taggart'. In support, *Claimant2* has provided a genealogical chart in attachment A to her statement, which shows that *Claimant2's mother*, was born in Howes Valley, Broke in *year* to *Claimant2's grandfather*, who was born in 1896 at Harrowly farm, near Singleton. *Claimant2* states in para 9 that she has been active in the community for more than 20 years trying to ensure that her cultural heritage is preserved and her people and other Aboriginal people who had come to live in her Country were given a fair go. She states in para 9 that '[c]aring for my country, the people within and my heritage is something I have always been taught and tried to do'.

[98] *Claimant2* states in para 2 that her *grandfather* was the eldest son of Henry Taggart, a Wonnarua man, from Henry's marriage to Mary Lawrence in Singleton in 1891. There were six children born to Henry and Mary. *Claimant2's mother* is the eldest child and as such, she is the recognised Elder of the *family line*. *Claimant2's mother* has handed the responsibility to speak for family and country, in the traditional way, to *Claimant2*.

¹⁶

I infer that this is a typographical error noting Henry's stated birth year of 1859.

[99] According to *Claimant2* (see para 3) Henry was born in 1859 or 1860 and his death certificate shows him as having been born at Howes Valley near Wollombi. The genealogical chart annexed to *Claimant2's* statement indicates that Henry was born at Howes Valley, Broke, as does Schedule A. (I note from the first Geospatial map that Wollombi is a town on Wollombi Brook, south of Broke. This is a tributary of the Hunter that runs south of Singleton to its headwaters at a point outside the south-eastern outer boundary. Broke is a town lying on Wollombi Brook, to the south of Singleton. Howes Valley lies some distance from Broke, Wollombi and Wollombi Brook, on a point outside the outer south-western boundary.)

[100] *Claimant2* states in para 3 that 'as my family knows it, Henry's mother was Emily (or possibly Polly) a Wonnarua woman born about 1840 who lived in the Sandy Hollow area'. (*Claimant2* says that Sandy Hollow is in the central part of Wonnarua territory. I have noted from the map in Attachment C that it lies near the outer western boundary. I have inferred that this is a reference then by *Claimant2* to the overall bounds of the wider Wonnarua territory.) Emily worked there as a domestic servant for the Chapman family. According to *Claimant2*, the Chapman property adjoined the Hungerford's property Baerami, the first parcel of land granted in the Sandy Hollow district in about 1828.

[101] *Claimant2* states in para 3 and 4 that Emily met up with John Taggart at a 'shindig' held at the Chapman property, the result of which was Emily's pregnancy and the threatened loss of her employment by the Chapman family if she did not find someone to care for the baby. Henry was given into the care of Mr Cobcroft, whose family resided in the Putty and Broke areas: see para 4 of *Claimant2's* statement. (The map in Attachment C shows that the town of Putty lies outside the south-western outer boundary.)

[102] *Claimant2* states in para 5 that '[i]t is also true that Emily was of the Plains Clan of the Wonnarua and I believe that she remained in the Sandy Hollow district for much of her life.' *Claimant2* goes on to say in para 5 that Emily's son Henry was able to keep in contact with Emily through regular horseback trips up to Sandy Hollow.

[103] *Claimant2* states in para 5 that she was told by her *grandfather* (Henry Taggart's son) of *grandfather's* trips with Henry as a kid to visit his Grandmother Emily 'following well known tracks from Broke back through Jerrys Plains, Denman and on to Sandy Hollow. *Grandfather* told *Claimant2* of his impatience on these long trips because his Dad 'would always stop to have a "chin wag" with people he knew to be from his mob'. They would sometimes come back via Muswellbrook (east of Sandy Hollow), Ravensworth and on to Mt Olive and Singleton and then on to Broke to catch up with the extended Franks, Smith and Lester families. *Claimant2* says in para 5 of her statement, that it was 'well known to me that the Franks were part of our local clan though not immediately blood related'. *Claimant2* tells of the Franks boys coming to town with fish for her family and how '[w]e always acknowledged, respected and had a genuine affection for them as part of our extended clan family'.

[104] *Claimant2* states in para 6 that her 'great-grandfather Henry was able to learn, practice and teach the Wonnarua lores and customs to his sons and daughters because although he was raised away from his mother he was fortunate to be brought up in the Broke-Bulga-Putty-Jerrys Plains area where many of the important gathering sites and ceremonial tracks of the Plains Clan occur'. *Claimant2* goes on to say that Henry was 'a young boy down in that area for example just ten or so years after 1852 when the last inter-tribal ceremony was reportedly held at the Bulga bora ground'.

[105] *Claimant2* states in para 6 that Henry 'spent a lot of time in and around the special places of the wider PCWP clan group at Warkworth, Broke, Jerry's Plains and Bulga.' *Claimant2* states that Henry would take her *grandfather* and his brothers out into the scrub down that way and teach them how to survive on the tucker found there. *Claimant2* states in para 7 that her *Uncle*, the first child of *grandfather's eldest sister*, (another child of Henry's) was brought up by Henry and practiced the traditional ways taught him by Henry throughout his life. *Claimant2* provides a copy of a newspaper article in Attachment F from 1975 about *Uncle* titled 'A living symbol of an ancient past' by PA Haslam. (I note that apart from the title, the copy of article in Annexure F is illegible.) *Claimant2* states in para 7 that although the article suggests that '*Uncle* was the "last of our mob" it does show how my family continued to maintain and practice the traditional ways until the present.' *Claimant2's* father would go out bush without food to hunt. *Claimant2's* mother also told her about her granddad hunting the grass parrots and rosellas that would gather during the corn harvest, when her mum lived out at Broke with her parents.

[106] The information provided in relation to Emily shows, in my view, a sufficient factual basis for an association with some parts of the application area, around Singleton, Broke, Bulga and Warkworth. This association would also appear to encompass the tracks between Broke and Jerrys Plains then up to Sandy Hollow, in the west. There is also information from *Claimant2* that her family visited with members of the claim group, particularly the Franks' family, who lived at Mt Olive, north of Singleton.

[107] It is not clear how far south the association by Henry and Emily extended. It is said that Henry was born in Howes Valley, Broke (see Schedule A and the genealogical chart found in *Claimant2's* statement) and given into the care of the Cobcroft family, who lived in the Putty and Broke areas. *Claimant2* says that Henry's death certificate places his birth at 'Howes Valley near Wollombi'. Wollombi lies on Wollombi Brook south of Broke, to the north of the south-western reaches along the outer boundary. There is a reference also to Henry's association with 'the Broke and Putty areas', where he was raised by Mr Cobcroft. It is apparent from the map in Attachment C that Howes Valley and Putty are in the mountainous regions of the Hunter Range beyond the plains of the Hunter River.

[108] Maps of the area indicate that the Putty Road runs in the vicinity of Broke (through Bulga), so it may be that Henry's association does not extend as far south as the town of Putty, which in

any event lies outside the south-western boundary of the claimed area. I note also that Howes Valley lies south of the MacDonald River (the southern outer boundary) and thus outside of the outer boundaries. The first Geospatial map, which depicts the Hunter River catchment boundary, shows that this is inside the outer boundary. In other words, the southern outer boundary, which is beyond the catchment boundary, is beyond the reaches of the overall Wonnarua association referenced in para 2 of Attachment F.

[109] In light of this, I am not satisfied that the factual basis is sufficient to support an assertion that the predecessors of the native title claim group had and that group currently has an association with the country that lies beyond the Hunter River catchment boundary. I say this because land south of the catchment boundary is beyond both the asserted territory of the overall Wonnarua People society and the smaller Plains Clans of the Wonnarua People group.

[110] Further, the information from *Claimant2* and other members of the claim group does not talk to an association either past or present with these southern and south-western areas, beyond some vague and generalised information that Henry may have been born or spent some of his childhood being raised by Mr Cobcroft.

[111] Given that this is the area occupied by Mt Yengo, the Macdonald River and the Yengo National Park (see second Geospatial map), I think that some specific information is necessary for me to be satisfied that there is a sufficient factual basis relating to an association, past and present, with these places by the predecessors of the native title claim group. I note that Mt Yengo does feature in the Biami creation story, however, this appears to relate to Biami stepping down onto 'Big Yango' as the protector of the wider Wonnarua People and creator of their lands: see the recount of the story in paras 7.1 to 7.5 in Annexure A under the heading 'Spiritual connection'.

[112] Although there is limited information about Emily herself, it is not too much of a stretch to infer that the association of the Taggart family and their predecessors, goes back to Emily's date of birth, some two decades after settlement. I am mindful that it is not necessary to show that all members have an association at all times (*Gudjala* 2007 at [52]). Emily's birth in the two decades after settlement, coupled with an association with the particular places I have discussed from the times of her son Henry, may be supportive of an inference that the Taggart family's association via their descent from Emily stretches back to the times of settlement. In this regard also, I note my findings below that the factual basis supports an assertion that Mary Shoe had, and her descendants also have, an association with some parts of the application area that dates back to Mary's birth before settlement. There is also the information from *Claimant2* discussing her family's ties with those of the claim group who lived north of the river and Singleton, including the Franks family from Mt Olive.

[113] In my view, the material does not provide a sufficient factual basis to support an assertion of an association between Emily and her descendants beyond the places I have discussed. As can

be seen from the maps, the area with which Emily's descendants are associated encompasses a relatively small part of the overall area within the outer boundaries, between Singleton, Broke and Bulga in the east and Sandy Hollow in the west. I also find that the factual basis supports an assertion that Emily's descendants had an association that extends north of the river around Singleton where *Claimant2's grandfather* visited with the extended clan families of the Franks, Smith and Lester, as is discussed in *Claimant2's* statement. These areas north of Singleton are located relatively centrally within the outer boundaries, but this is still proportionally smaller than the overall area encompassed by the outer boundaries shown on the map in Attachment C.

Mary Shoe

[114] The facts in relation to Mary Shoe's association with the area are found in Schedule A of the application, paras 12.1 to 12.9 of Annexure A and in the following statements:

(a) Scott McCain Franks dated 24 August 2012 in Annexure B.

(b) *Claimant1* dated 12 September 2012 in Annexure C.

[115] Mary Shoe was an Aboriginal woman born in approximately 1800 in the Singleton district. The result of a union with an Englishman, Joseph Hughes, was a child, Matilda Hughes. Matilda was born at Sydenham (near Singleton) in 1832. Sydenham was the name given to the 800 acres of land on the west side of Falbrook granted to an early settler in 1824. Falbrook is the name of town on a northern tributary of the Hunter. (I note that alternative spellings used in the material for Falbrook are 'Fallbrook' and 'Fal Brook').

[116] Matilda Hughes married James Arthur Smith at Falbrook and her two children, Mary Anne Smith and William "Billy" Smith were born, respectively, at Glennies Creek or Bridgman near Singleton in 1857 and at Sydenham near Singleton in 1858. I can see that Glennies Creek/Bridgman is approximately 10kms to the north of Singleton. Falbrook is a similar distance to the north of Singleton.

[117] Mr Franks is a descendant of Mary Shoe, via William 'Billy' Smith. Mr Franks describes his own association and that of his family with the country around Mt Olive and St Clair where he grew up, dating back to his *paternal grandmother*. *Paternal grandmother* was born in the latter years of the 19th century in Singleton, the daughter of William Billy Smith, and is the great-grandchild of the ancestor Mary Shoe. Mr Franks states at para 1 that '[m]y Aboriginality derives from the line of my *paternal grandmother* ... a Wonnarua woman born at Falbrook near the village of Camberwell, in 1894.'

[118] The information provided by Mr Franks in Annexure B shows an extensive association with both a physical and spiritual dimension in the central parts of the application to the north of Singleton along the tributaries of the Hunter up to Mt Olive and St Clair. It also extends south of the river between Singleton and Jerrys Plains to Bulga and Broke along Wollombi Brook. The

association by Mr Franks' was aided by a very close relationship with his *Uncle* and *Cousin1*, who took him out bush, taught him to hunt, to trap fish and showed him traditional walking tracks and ceremonial places, particularly around Bulga and Jerrys Plains. Mr Franks grew up on a farm at Mt Olive first started by his *grandfather*, who married Mr Franks Aboriginal *grandmother*.

[119] The factual basis supports an assertion that Mr Franks' association extends to the times of his Aboriginal great-grandfather, William Billy Smith, who was born in 1858, on a ceremonial site near Singleton (at Sydenham) and who was 'a lore man and Wonnarua "Chief"'.¹⁷ Genealogical and historical data shows that William was the grandson and son respectively of apical ancestor Mary Shoe and her daughter Matilda Hughes (who died in 1913). There is limited information in relation to Mary Shoe and Matilda Hughes, the two persons at the apex of the Franks' family tree alive at and shortly after European settlement. However, in my view, it is not too much of a stretch to infer that the factual basis supports an assertion that the association of the Franks family goes back to the birth of Mary Shoe in approximately 1800 and thus extends back before settlement.

[120] Another descendant of Mary Shoe (*Claimant1*) says in para 7 of her statement in Annexure C that 'my family has always identified as Wonnarua of the Plains Clan with specific ancestral links to our clan lands about Ravensworth, Camberwell, Bridgman, Singleton, Glendon, Carrowbrook, Mt Royal and Goorangoola'. These places are located within an area that stretches a short distance north of Singleton to Mt Royal, which lies along the north-eastern outer boundary.

[121] *Claimant1* states in para 1 that '[m]y Aboriginality derives from the ancestral line of my *mother* ... born in Singleton in 1937, the daughter of *Claimant1's* *grandparents* who, in turn, were both descendants of Matilda Hughes'. *Claimant1's* grandparents were born in the early years of the 20th century at Goorangoola and Mt Olive (north of Singleton).

[122] *Claimant1's* genealogical chart¹⁸ shows that her *grandfather* was the son of James 'Jim' Smith, another child of Matilda Hughes. The chart shows that *grandmother* was also descended from Mary Shoe via another child of Matilda Hughes. This, then, is part of the extended family network that includes the Franks family who are also the descendants of a child of Matilda Hughes.

[123] *Claimant1* describes learning about her country from her *grandmother*, including creation stories, fish trapping and bush food sources. *Claimant1* would go out with her Grandmother to collect food, berries and other wild bush tucker along the banks of the Hunter River, when

¹⁷ See para 1 of the statement in Annexure B.

¹⁸ See Attachment A of her statement.

visiting her Gran as a young girl. *Claimant1's grandmother*, although taken as a child of 10 to Sydney, returned to Singleton when she was 18 years old.

[124] *Claimant1's grandfather* also identified as Wonnarua. *Grandfather* would take *Claimant1's dad and sibling* up to Mt Royal on horseback, where he taught them many things about Wonnarua country, including the ways of the old people and men's business. *Claimant1's* family visited the Franks family at Mt Olive, who were part of her extended family. *Claimant1's grandfather* and *Mr Franks' grandmother* were first cousins. They would go out fishing with the Franks' family using cicadas as bait and a three-pronged spear her Grandfather made from she-oak trees. *Claimant1's* family would visit their cousins out at Jerrys Plains. *Claimant1's* mother would reinforce the importance of the Jerrys Plains area, including the closeness of ceremonial tracks, birthing sites and important gathering grounds, such as around Warkworth.

Conclusions regarding predecessors' association

[125] In my view, the factual basis is supportive of an association by Mary Shoe and Emily with part of the area covered by the application. The association encompasses the Hunter River between Singleton in the east and Jerrys Plains in the west. The association appears to extend to areas along the tributaries of the Hunter up to Carrowbrook and Mt Royal in the north and south to Bulga, Broke and the Wollombi Brook Valley and west to Emily's place of residence at Sandy Hollow.

[126] In my view, what is missing is an explanation as to how two Aboriginal women, one of whom was alive when the area was settled, the other who was born approximately two decades later, and from whom current members of the native title claim group descend, had an association with areas beyond the regions I have discussed. All of the material provided points to an association only with those middle reaches of the Hunter River, which traverse the area relatively centrally east to west from Maitland, Singleton and Denman and onto Sandy Hollow and the tributaries of the river north to Mt Royal and south to Bulga, Broke and along the Wollombi Brook.

Current association with the area by the native title claim group

[127] In my view, the factual basis does not support an assertion that the native title claim group have an association that covers the entire area. In this regard, I have noted that Mr Franks has provided further affidavits, in Attachments F2, F3 and F4, which speak to current association with other places to that discussed in the earlier statements provided in Annexures B to D.

[128] The affidavit in Attachment F2 speaks to an association with the area around Bulga (where Mr Franks has undertaken a cultural heritage study for Xstrata Bulga Coal of the Aboriginal ecological resources of the Hunter plains) and Neath (proximate to Maitland in the south-east of the area). In this affidavit Mr Franks tells of a song line that runs back into the Broke area around Lizard Mountain. In para 11, Mr Franks recounts this story of Biامي and his son Little Biامي: 'I

was told that as he stood at the bottom of Wollombi looking north towards our country, Biami told his son to stay behind and protect his people, the Wonnarua'. Mr Franks tells how Little Biami laid a giant lizard to sleep on the mountain range between Broke and Cessnock, the traditional name for which is *wirramin kooran* and means Lizard Mountain.

[129] The affidavit in Attachment F3 provides information about the association of Mr Franks' *Cousin2*, who used to live very close the area covered by the Neath claim on a property between Neath and Abermain. *Cousin2*, now deceased, was a descendant of Mary Shoe through his *grandmother* and his association appears to have been around these places in the southeast of the area, including around Wollombi Brook, Cessnock and Paxton.

[130] The affidavit in Attachment F4 discusses the association that Mr Franks has with areas in the previous statements and affidavits as far north as Scone, Wingen, the Liverpool Range, Carrowbrook and Mt Royal. Mr Franks discusses the association of a man named *Person1* with Mt Royal (also along the north-eastern boundary) who owned a property nearby. It is not clear that *Person1* is a member of the native title claim group. It is said in para 16 that *Person1's* family came to the Valley in the early days and owned a block of land near the intersection of Carrowbrook Road and Mt Royal Road, nearby the site of a church that was once a campsite for Mr Franks people: the Smiths. Mr Franks states in para 16 that '*Person1* grew up with them and was taught some of our ways.' Mr Franks spent time with *Person1* on his place in the 1980s as a teenager, when *Person1* was elderly: para 17. Mr Franks on one occasion headed up the mountains to 'howl up' a dingo that was taking *Person1's* poultry, as he had been taught to do by his *Uncle*.

[131] Overall, the information in the Attachment F4 affidavit does speak to a current association by Mr Franks with the northern parts of the application area, east of the Hunter, which appears to have been facilitated by his family's relationship with *Person1*.

[132] Mr Franks does talk about Scone, Burning Mountain (Wingen) and the Liverpool Range (west of the Hunter River) in his Attachment F4 affidavit. However it appears that he does so in the context of these places forming the boundary between the Wonnarua People and the Geawegel around Burning Mountain and the Kamilaroi around the Liverpool Ranges. This is consistent with the accounts in para 2 of Attachment F and paras 1.1, 4.3 and 4.4 of Annexure "A" that the northern boundary of the wider Wonnarua People is understood to have extended as far north as the Liverpool Ranges.

[133] Having considered the totality of the information, I am of the view that the factual basis supports an assertion that the native title claim group, as described in Schedule A of the application, has an association with some of the area covered by the application around:

- (a) the plains and middle reaches of the Hunter River between Maitland, Singleton and Jerrys Plains, up to Denman and Sandy Hollow
- (b) north along the tributaries of the Hunter around Falbrook, Mount Olive, St Clair and north to Carrowbrook and Mt Royal
- (c) south and southeast of Singleton and Jerrys Plains to Bulga, Warkworth and Broke, along the Wollombi Brook.

[134] However, there is no information in my view that talks in a meaningful way to an association with the area beyond the western banks of Hunter River in the north-west of the application. Nor is there information that speaks to the southern areas, beyond the Hunter River catchment boundary. Further, there is little information discussing western areas, in the mountainous regions of Wollemi National Park.

[135] It is particularly noteworthy, in my view, that *Claimant1* identified in para 7 of her statement that her family have always identified as the 'Plains Clans of the Wonnarua People with specific ancestral links to our clan lands about Singleton, Glendon, Carrowbrook, Mt Royal and Goorangoola'. These places fall within the areas discussed by Mr Franks, who grew up and has spent much of his life within a similar geographic range. It accords also with the statement in para 5 of Attachment F that the native title claim group 'identify as the Aboriginal descendants of the Wonnarua peoples who occupied a tract of country that encompassed the middle reaches of the Hunter River and its tributaries around Singleton (Patricks Plains) and are the Aboriginal people who speak for that country today.'

[136] For the reasons outlined, I am **not satisfied** that the factual basis is sufficient to support an assertion that 'the native title claim group have, and the predecessors of those persons had, an association with the area'. As set out in detail above, my reasons for so finding relate to the lack of information about an association with areas beyond the plains and middle reaches of the Hunter River and its tributaries north and south of Singleton.

Section 190B(5)(b): Relevant legal principles

[137] The factual basis must be sufficient to support an assertion that 'there exist traditional laws acknowledged by, and traditional customs observed by, the native title claim group that give rise to the claim to native title rights and interests.'

[138] The language of the assertion in s. 190B(5)(b) nearly mirrors that found in s. 223(1)(a), which is part of the definition for the term 'native title rights and interests'. In my view, the factual basis must address the assertion that the claimed native title rights and interests find their source in 'traditional' laws and customs.

[139] My usage of inverted commas around the word ‘traditional’ highlights that its meaning in s. 223(1)(a) is central to an understanding of the sufficiency of the factual basis provided to support the assertion that ‘there exist traditional laws acknowledged by, and traditional customs observed by, the native title claim group that give rise to the claim to native title rights and interests’. I understand that the legislature intends that the expression ‘traditional’ in relation to the meaning of native title rights and interests is used uniformly throughout the Act; hence what the High Court and other courts have decided in relation to this should inform my consideration of the sufficiency of the asserted factual basis for this particular assertion.

[140] Accordingly, in considering the sufficiency of the factual basis provided by an applicant for the purposes of s 190B(5)(b), I must pay attention to the High Court’s decision in *Members of the Yorta Yorta Aboriginal Community v Victoria* (2002) 214 CLR 422; (2002) 194 ALR 538; [2002] HCA 58 (*Yorta Yorta*) and in subsequent decisions as to what is meant by rights and interests in relation to land and waters being possessed under ‘traditional’ laws and customs: see Dowsett J at [26] of *Gudjala* 2007. This aspect of Dowsett J’s decision was not criticised by the Full Court in *Gudjala FC*, who noted that one question, amongst others, which needs to be addressed is whether ‘there was, in 1850–1860¹⁹, an indigenous society in the area, observing identifiable laws and customs’ — at [96].

[141] The following is a brief synopsis of my understanding of the case law which has developed around the requirement in s. 223(1)(a) that native title rights and interests in relation to land and waters must be possessed under ‘traditional’ laws and customs:

- (a) for laws and customs to be ‘traditional’, they must derive from a body of norms or normative system that existed before sovereignty and which has had a substantially continuous existence and vitality since sovereignty
- (b) a society is a body of people united in their acknowledgement and observance of laws and customs with normative content
- (c) the acknowledgement and observance of the laws and customs of the pre-sovereignty normative system must have continued ‘substantially uninterrupted’ in each generation from sovereignty until the present time
- (d) it is this continuity in the acknowledgement/observance of traditional laws and customs, rather than continuity of a society, which must inform the inquiry as to whether the native title is possessed under ‘traditional’ laws and customs;
- (e) change or adaptation of traditional law and custom may be acceptable; however, the trial court needs to carefully consider whether it points to a cessation or substantial interruption of the normative system, such that the laws and customs currently acknowledged and observed

¹⁹

I note that this was the period during which the area covered by the Gudjala People’s application was settled by the Europeans.

are no longer traditional; i.e. they are not the laws and customs of the normative system at sovereignty.²⁰

[142] Having regard to the case law, it is my view that a sufficient factual basis to support the assertion in s 190B(5)(b) needs to address that the relevant traditional laws and customs have their origin in a pre-sovereignty normative system with a substantially continuous existence and vitality since sovereignty. I refer to comments by Dowsett J in *Gudjala* 2007 that the factual basis materials to support this assertion must address:

- (a) that the laws and customs currently observed have their source in a pre-sovereignty society and have been observed since that time by a continuing society—at [63];
- (b) that there existed at the time of European settlement a society of people living according to a system of identifiable laws and customs, having a normative content—at [65] and see also at [66] and [81];
- (c) the link between the claim group described in the application and the area covered by the application, which, in the case of a claim group defined using an apical ancestry model, may involve ‘identifying some link between the apical ancestors and any society existing at sovereignty, even if the link arose at a later stage’, although the apical ancestors need not themselves have comprised a society—at [66].

[143] This aspect of Dowsett J’s decision was not criticised by the Full Court in *Gudjala FC*—at [71], [72] and [96].

[144] I refer also to these additional comments by Dowsett J on remittal back by the Full Court, in *Gudjala People #2 v Native Title Registrar* [2009] FCA 1572 (*Gudjala* 2009) about s. 190B(5)(b):

- (a) a sufficient factual basis must address the following elements:
 - i. a system of laws and customs which recognizes that the relevant claim group has a connection with the land or waters in question;
 - ii. that such laws and/or customs have been passed down continuously through a society which existed prior to sovereignty and continues to exist; and
 - iii. that although such current laws and customs may not be identical to those which obtained prior to sovereignty, they have their roots in the pre-sovereignty laws and customs—at [22];

²⁰ In addition to *Yorta Yorta*, I refer to the following decisions by the Full Court, which have considered what is required under s. 223(1) in light of the principles laid down in *Yorta Yorta: Northern Territory v Alyawarr, Kaytetye, Warumungu, Wakaya Native Title Claim Group* (2005) 145 FCR 442; [2005] FCAFC 135 (*Alyawarr FC*), *Risk v Northern Territory of Australia* (2007) 240 ALR 75; [2007] FCAFC 46 (*Risk*) and *Bodney v Bennell* (2008) 167 FCR 84; [2008] FCAFC 63 (*Bennell FC*).

- (b) identification of an Indigenous society at sovereignty is the starting point, as it ‘is impossible to identify a system of laws and customs as such without identifying the society which recognizes and adheres to those laws and customs’ — at [36];
- (c) there must be some link between the claim group and the claim area, including the identification of a link between the apical ancestors (if used to define the claim group) and the relevant society from which the claim group asserts that it has derived its native title rights and interests — at [40].

[145] I have also considered Dowsett J at [29] of *Gudjala 2009* that the Registrar must ‘be careful not to treat, as a description of that factual basis, a statement which is really only an alternative way of expressing the claim or some part thereof.’ It would not be sufficient for an applicant to assert that the claim group’s laws and customs are traditional because they derive from a pre-sovereignty society of which they are descendant. That would merely be a restatement of the claim without any factual basis—‘there must at least be an outline of the facts upon which the applicant relies’.

Section 190B(5)(b): Consideration

[146] It is my view that the starting point for an applicant seeking to address subparagraph 190B(5)(b) is to identify the relevant society operating in the region occupied by the application area at the time of sovereignty or, at the very least, the time of contact/settlement. Once identified, the factual basis must be sufficient to support the assertion that traditional laws and customs with a normative content are derived from that society/normative system and which have had a substantively uninterrupted operation since sovereignty exist in relation to the area covered by the application.

[147] Attachment F states that the relevant society at settlement in the early 1820s was the ‘Wonnarua People’, who are identified in the early records as being the occupiers of a broad reach of country traversed by the Hunter River and which became known as the Hunter Valley from Maitland in the east to the apex of the Liverpool Range in the north. This is also discussed under the headings ‘The People’ and ‘Language’ at paras 1.1 to 2.3 of Annexure A.

[148] Page 2 of Attachment F contains the following:

In Wonnarua society there exist traditional laws and customs that give rise to the native title rights and interests, including the native title rights and interests of the PCWP:

4. The pre-sovereignty traditional laws and customs of the Wonnarua People conferred rights on particular groupings of people to particular areas, including rights to speak for country and to use resources of that country.
5. Mary Shoe and Emily, and their immediate offspring Matilda Hughes and Henry “Harry” Taggart respectively, have a documented association with the Hunter River catchment and the broader Singleton (Patricks Plains) region from about the mid 1800s. The PCWP (the

descendants of Mary Shoe and Emily) identify as the Aboriginal descendants of the Wonnarua peoples who occupied a tract of country that encompassed the middle reaches of the Hunter River and its tributaries around Singleton (Patricks Plains) and are the Aboriginal people who speak for that country today and have the right to use its resources.

6. The native title rights and interests held by the PCWP, are pursuant to and possessed under the traditional laws and customs of the Wonnarua People, including traditional laws and customs that give rise to native title rights and interests in particular land and waters on the basis of:

- (i) ancestral connection to the area;
- (ii) residence on the area;
- (iii) traditional religious knowledge of and affiliations to and responsibility for the area; and
- (iv) traditional knowledge of the resources of the area.

[149] In my view, the central question is whether the factual basis is sufficient to support the assertion of the existence now of *traditional laws acknowledged by*, and *traditional customs observed by*, the native title claim group *that give rise to the claim* to native title rights and interests.

[150] What is said for this claim is that there are traditional laws and customs, asserted to have 'conferred rights on particular groupings of people to particular areas, including rights to speak for country and to use the resources of that country' (see para 4 of Attachment F). It is said in para 5 of Attachment F that the descendants of Mary Shoe and Emily and their immediate offspring Henry Taggart and Matilda Hughes 'identify as the Aboriginal descendants of the Wonnarua peoples who occupied a tract of country that encompassed the middle reaches of the Hunter River and its tributaries around Singleton (Patricks Plains) and are the Aboriginal people who speak for that country today and have the right to use its resources.'

[151] As I have explained in my reasons above, this appears to be the tract of country with which the group has a past and present association, but it is a proportion only of the overall area encompassed by the application. I note that 'the middle reaches of the Hunter River and its tributaries around Singleton (Patricks Plains)' lies relatively centrally within the boundaries of the claimed area. It does not extend to the upper reaches of the Hunter Valley in the north-western parts of the area covered by the application. Nor does it extend to the mountainous regions in the south and south-west of the outer boundaries of the area.

[152] There are other problems with the factual basis materials provided in support of the assertion of s 190B(5)(b). How the native title claim group 'identify' under the *traditional* laws and customs of the Wonnarua People for the area overall has not, in my view, been explained. I cannot find any information or facts, which would establish a link between Mary Shoe and Emily with those parts of the area covered by the application beyond the middle Hunter River and its tributaries. In addition, there is no information to show the factual basis to support the assertion that the traditional laws acknowledged and traditional customs observed by a wider Wonnarua

society give rise to the claim that the descendants of Mary Shoe and Emily alone are entitled to claim native title rights and interests in the entire area encompassed by the outer boundaries of the claim.

[153] Having read all of the materials, it appears to me that:

- (a) The native title claim group, as described, is a subgroup of a wider group called the Wonnarua People.
- (b) The wider Wonnarua People are identified in historical and ethnographical accounts and the group's own dreaming stories (i.e. the Biami creation story recounted by Mr Franks) as being associated with the whole of the Hunter Valley from Maitland in the south to the Liverpool Range in the north, at the time of European settlement.
- (c) There is nothing in the material to support the assertion that the more confined group described in this application have, under the traditional laws acknowledged and traditional customs observed by them, a claim to native title rights and interests that extends over all of the area covered by the application.

[154] For these reasons, I am **not satisfied** that the factual basis is sufficient to support an assertion that there exist traditional laws acknowledged by, and traditional customs observed by, the native title claim group that give rise to the claim to native title rights and interests.

Section 190B(5)(c)

[155] The factual basis must be sufficient to support an assertion 'that the native title claim group have continued to hold the native title in accordance with those traditional laws and customs'.

[156] In my view, there is a clear link between this paragraph and s 190B(5)(b). If I am not satisfied that the factual basis is sufficient to support the assertion in s 190B(5)(b), then it follows that I cannot be satisfied that of a sufficient factual basis for s 190B(5)(c) (this received support from French J at [29] of *Martin*.)

[157] *Gudjala 2007* indicates that this particular assertion may require the following kinds of information:

- (a) that there was a society that existed at sovereignty that observed traditional laws and customs from which the identified existing laws and customs were derived and were traditionally passed to the current claim group;
- (b) that there has been continuity in the observance of traditional law and custom going back to sovereignty or at least European settlement—at [82].

[158] I understand that the reference in s 190B(5)(c) to 'those traditional laws and customs' is a reference to the traditional laws and customs asserted to have been acknowledged and observed

by the native title claim group, for which a factual basis is provided under s. 190B(5)(b). Although there is some information about the laws and customs acknowledged and observed by a Wonnarua People society before settlement, in my view the factual basis is not sufficient to support an assertion that the current laws and customs are ‘traditional’, in the sense that they have continued to have been acknowledged and observed in a substantially uninterrupted way, since before settlement.

[159] For these reasons, I am **not satisfied** that the factual basis is sufficient to support an assertion that the native title claim group have continued to hold the native title in accordance with traditional laws and customs.

190B(6) Prima facie case

[160] The claim **does not satisfy** the condition of s 190B(6).

[161] Section 190B(6) provides that ‘[t]he Registrar must consider that, prima facie, at least some of the native title rights and interests claimed in the application can be established.’

[162] In the absence of a sufficient factual basis being provided by the applicant to support the assertions set out in s 190B(5)(a)-(c), it must follow I cannot consider that, prima facie, at least some of the native title rights and interests can be established. That an application which does not satisfy the merit condition at s 190B(5) must also fail to satisfy the condition found in s. 190B(6) is supported by the decision in *Gudjala 2007* at [87], an aspect of the decision which was not affected by judgment in the appeal to the Full Court. I refer also to *Gudjala 2009* where it was noted that, if s 190B(5) is not met, then it must follow that s 190B(6) is also not met—at [84]. Most recently, Siopsis J followed a similar course and did not disturb the Tribunal’s decision that a failing at s 190B(5) meant that the condition of s 190B(6) was also not met—see [26] of *Corunna*.

190B(7) Traditional physical connection

[163] The claim **does not satisfy** the condition of s 190B(7).

[164] Section 190B(7) provides that:

The Registrar must be satisfied that at least one member of the native title claim group:

- (a) currently has or previously had a traditional physical connection with any part of the land or waters covered by the application; or
- (b) previously had and would reasonably be expected to currently have a traditional physical connection with any part of the land or waters but for things done (other than the creation of an interest in relation to the land or waters) by:
 - (i) the Crown in any capacity; or
 - (ii) a statutory authority of the Crown in any capacity; or
 - (iii) any holder of a lease over any of the land or waters, or any person acting on behalf of such a holder of a lease.

[165] Dowsett J indicated in *Gudjala 2007* that to satisfy this condition there must be material to satisfy the Registrar that:

... the relevant connection was in accordance with laws and customs of the group having their origin in pre-contact society. This seems to be consistent with the approach taken in *Yorta Yorta* — at [89].

[166] Dowsett J indicated that an application which fails to satisfy the requirements of s 190B(5) will likewise fail this condition due to the requirement for material showing a ‘traditional physical connection.’ This aspect of the decision was not disturbed on appeal to the Full Court. I refer also to *Gudjala 2009* that:

As to s 190B(7), much may depend upon the meaning of the term “traditional physical connection”. I have not been referred to any authority on the point. It seems likely that such connection must be in exercise of a right or interest in land or waters held pursuant to traditional laws and customs. For the reasons which I have given, the requirements of that subsection are not satisfied. — at [84].

[167] In my view, the phrase ‘traditional’ physical connection means a physical connection in accordance with the particular traditional laws and customs relevant to the native title claim group, with ‘traditional’ having the meaning discussed in *Yorta Yorta*.

[168] The claim must therefore fail this condition as a result of my finding that it does not satisfy s 190B(5)(b) and (c).

190B(8) No failure to comply with s 61A

[169] The claim **satisfies** the condition of s 190B(8).

[170] Section 190B(8) provides that ‘[t]he application and accompanying documents must not disclose, and the Registrar must not otherwise be aware, that because of section 61A (which forbids the making of applications where there have been previous native title determinations or exclusive or non-exclusive possession acts), the application should not have been made.

Section 61A(1)

[171] Section 61A(1) provides that a native title determination application must not be made in relation to an area for which there is an approved determination of native title. There are no determination of native title in relation to the area covered by the application: see Geospatial report dated 2 September 2013

Section 61A(2)

[172] Section 61A(2) provides that a claimant application must not be made over areas covered by a previous exclusive possession act, unless the circumstances described in subparagraph (4) apply. Although it appears that much of the area, which is in a heavily settled part of New South

Wales, will be covered by such acts, Attachment B contains a description of the internal excluded areas which references the PEPA provisions of the Act. I note that the description does not reference the relevant PEPA provisions of the *Native Title (New South Wales) Act 1994* in relation to acts attributable to the State. However the 'catch-all' exclusion of areas where native title otherwise wholly extinguished would appear to clarify that areas covered by such acts are not covered by the application.

Section 61A(3)

[173] Section 61A(3) provides that an application must not claim native title rights and interests that confer possession, occupation, use and enjoyment to the exclusion of all others in an area where a previous non-exclusive possession act was done, unless the circumstances described in s 61A(4) apply. The description of the native title rights and interests claimed (see schedule E) identifies that exclusive rights are only claimed where there has been no extinguishment or the non-extinguishment principle applies.

190B(9) No extinguishment etc. of claimed native title

[174] The claim **satisfies** the condition of s 190B(9).

[175] Section 190B(9) provides that:

The application and accompanying documents must not disclose, and the Registrar must not otherwise be aware, that:

- (a) to the extent that the native title rights and interests claimed consist of or include ownership of minerals, petroleum or gas—the Crown in the right of the Commonwealth, a State or a Territory, wholly owns the minerals, petroleum or gas;
- (b) to the extent that the native title rights and interests claimed relate to waters in an offshore place—those rights and interests purport to exclude all other rights and interests in relation to the whole or part of the offshore place; or
- (c) in any case—the native title rights and interests claimed have otherwise been extinguished (except to the extent that the extinguishment is required to be disregarded under subsection 47(2), 47A(2) or 47B(2)).

Section 190B(9)(a): claims to ownership of minerals petroleum or gas wholly owned by the Crown

[176] The claim satisfies s. 190B(9)(a) as Schedule Q states that the application does not make any claim for ownership of minerals, petroleum or gas wholly owned by the Crown.

Section 190B(9)(b): Offshore places

[177] The claim satisfies s. 190B(9)(b) as it does not extend to any offshore places.

Section 190B(9)(c): Other extinguishment

[178] The claim satisfies s. 190B(9)(c) as the application does not disclose, nor is there any information before me to indicate, that the claimed native title rights and interests have been otherwise extinguished.

190C Registration: conditions about procedural and other matters

[179] Section 190C(1) provides that '[t]his section contains the conditions mentioned in subparagraph 190A(6)(b)(ii).'

190C(2) Information etc. required by sections 61 and 62

[180] The claim **satisfies** the condition of s 190C(2).

[181] Section 190C(2) provides that '[t]he Registrar must be satisfied that the application contains all details and other documents, and is accompanied by any affidavit or other document, required by sections 61 and 62.'

[182] In my view the application contain all of the details and other information and documents required by ss 61 and 62, as set out in the *Table* below. In reaching my decision, I understand that this condition is procedural only and simply requires me to be satisfied that the application contains the things identified in s 190C(2). It does not require me to undertake any merit or qualitative assessment of the material for the purposes of s 190C(2)—*NT v Doepel* at [16] and also at [35]–[39]. In other words, does the application contain the prescribed details and other information?

[183] *NT v Doepel* is authority, in my view, that I must not look beyond the application, nor must I undertake a merit assessment to determine if I am satisfied whether the native title claim group described in the application (see ss 61(1) and (4)) is the correct native title claim group—at [35] to [37], [39] and [47]. That said, in seeking to verify that an application contains all the details and information required by ss 61 and 62, I do ensure that a claim 'on its face, is brought on behalf of all members of the native title claim group' as that term is defined in s 61(1)—*NT v Doepel* at [35] to [37].

Table: *Identifying location of details/information/accompanying documents required by ss 61 and 62*

What is required under ss 61 & 62	Location within Form 1 or other document
s61(1) Persons who may make application	Form 1, Part A, 2
s61(3) Name and address for service	Form 1, Part B
s61(4) Native title claim group named/described	Schedule A
s62(1)(a) Affidavits in prescribed form	Affidavits by Scott McCain Franks and Robert John Lester filed on 19/8/2013

s62(2)(a) Information about the boundaries of the area	Schedule B (see Attachments B1 and B2)
s62(2)(b) Map of external boundaries of the area	Schedule C (see Attachment C)
s62(2)(c) Searches	Schedule D
s62(2)(d) Description of native title rights and interests	Schedule E
s62(2)(e) Description of factual basis	Schedule F (See Attachments F, F1–F4)
s62(2)(f) Activities	Schedule G
s62(2)(g) Other applications	Schedule H
s62(2)(ga) Section 24MD(6B)(c) notices	Schedule HA
s62(2)(h) Section 29 notices	Schedule I

190C(3) No common claimants in previous overlapping applications

[184] The claim **satisfies** the condition of s 190C(3).

[185] Section 190C(3) provides that:

The Registrar must be satisfied that no person included in the native title claim group for the application (the *current application*) was a member of the native title claim group for any previous application if:

- (a) the previous application covered the whole or part of the area covered by the current application; and
- (b) an entry relating to the claim in the previous application was on the Register of Native Title Claims when the current application was made; and
- (c) the entry was made, or not removed, as a result of the previous application being considered for registration under section 190A (original emphasis).

[186] There are two previously registered native title determination applications which overlap the application are:

- (a) the Gomeroi application (NSD2308/2011)
- (b) the Awabakal and Guringai People application (NSD780/2013)

[187] I have considered the descriptions of the persons in the native title claim groups for these two claims and compared these with the native title claim group in the current application. I can find no common members between the two groups. There is nothing on the face of the

information in the current application to indicate that there are members in common. I am therefore satisfied that there are no members in common between the Plains Clans of the Wonnarua People claim group and the claim groups in the above two applications.

190C(4) Identity of claimed native title holders (authorisation)

[188] The claim **satisfies** the condition of s 190C(4).

[189] Section 190C(4) provides that:

The Registrar must be satisfied that either of the following is the case:

- (a) the application has been certified under Part 11 by each representative Aboriginal/Torres Strait Islander body that could certify the application in performing its functions under that Part; or

...

- (b) the applicant is a member of the native title claim group and is authorised to make the application, and deal with matters arising in relation to it, by all the other persons in the native title claim group.

Note: The word *authorise* is defined in section 251B (original emphasis).

[190] The application is not certified under subsection 190C(4)(a). Section 190C(5) provides that if the application has not been certified, the Registrar cannot be satisfied that the condition in subsection (4) has been satisfied unless the application includes a statement to that effect and 'briefly sets out the grounds on which the Registrar should consider that it has been met.'

[191] Scott McCain Franks and Robert John Lester are jointly the applicant and have each made an affidavit that accompanies the application. They each state that they are a member of the native title claim group via descent from an apical ancestor named in Schedule A of the application. On this basis, I am satisfied that the applicant is a member of the native title claim group. The application also contains the statements and a brief setting out of the grounds in Attachment R.

[192] Section 251B provides the meaning of the word 'authorise':

For the purposes of this Act, all the persons in a native title claim group ... authorise a person or persons to make a native title determination application ... and to deal with matters arising in relation to it, if:

- a) where there is a process of decision-making that, under the traditional laws and customs of the persons in the native title claim group ..., must be complied with in relation to authorising things of that kind—the persons in the native title claim group ... authorise the person or persons to make the application and to deal with the matters in accordance with that process; or
- b) where there is no such process—the persons in the native title claim group ... authorise the other person or persons to make the application and to deal with the matters in accordance with a process of decision-making agreed to and adopted, by the persons in the native title claim group ... in relation to authorising the making of the application and dealing with the matters, or in relation to doing things of that kind.

[193] Authorisation in this case is asserted to have taken place pursuant to a mandated traditional decision making process, as described in s 251A(a) of the Act. Attachment R of the application and each of the affidavits accompanying the application by Scott McCain Franks and Robert John Lester sets out the details of the decision making process employed by the native title claim group to authorise the applicant to make and deal with the application.

[194] In this case, the applicant states that the traditional decision making process which must be followed has these features:

- (a) a decision requires the agreement of each family group within the native title claim group
- (b) the persons in each family group who make decisions for that family are the persons accepted by the other family members as their Elders
- (c) the Elders determine with home and how they will consult before making a decision and each family group may appoint a representative authorised to speak for their family, who must report back to the Elders and follow instructions from the Elders.

[195] The applicant states that this process was followed:

- (a) On 18 February 2012 when the Elders and other members of the claim group met in Singleton, and confirmed that decisions were to be made by the Heads of Family, by discussion and agreement between them. The recognised family heads at this time were *Family Head1*, *Claimant2*, *Family Head2* and Robert Lester. *Claimant1* has succeeded *Family Head1*, who passed away recently.
- (b) On 5 May 2013, when the family heads met at Mt Olive and authorised the two persons comprising the applicant to make the application and to do all things arising in relation to it.

[196] On the basis of the information in Attachment R and the affidavits by the applicant, I am satisfied that the applicant is authorised to make the application and to deal with matters arising in relation to it by all the other persons in the native title claim group.

[end of statement]

Appendix 4

AHIMS Search

RPS Australia East Pty Ltd -Hamilton

Date: 21 May 2014

Accounts Payable Fortitude Valley PO Box 237

Brisbane Queensland 4006

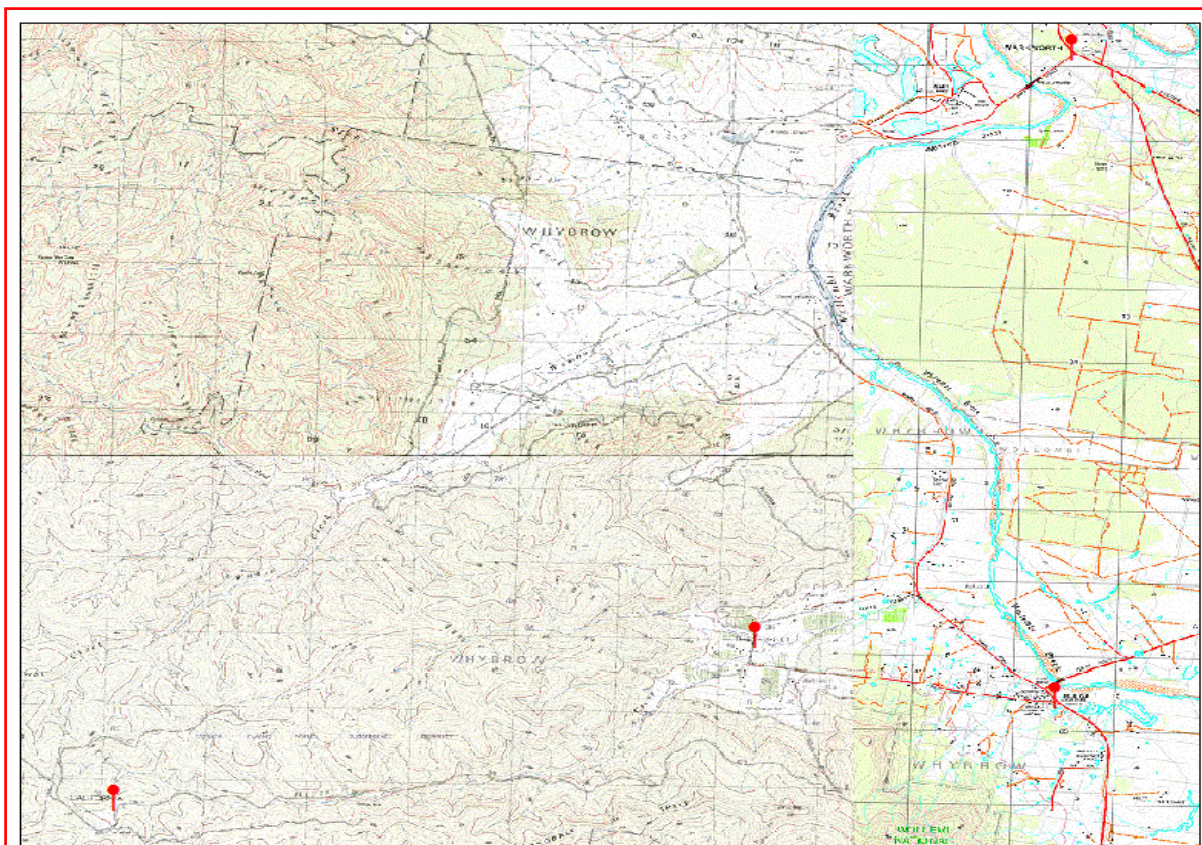
Attention: Cultural Heritage Team Administrator

Email: clh@rpsgroup.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 304247 - 315731, Northings : 6387345 - 6390500 with a Buffer of 0 meters, conducted by Cultural Heritage Team Administrator on 21 May 2014.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

118	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

RPS Australia East Pty Ltd -Hamilton

Date: 21 May 2014

Accounts Payable Fortitude Valley PO Box 237

Brisbane Queensland 4006

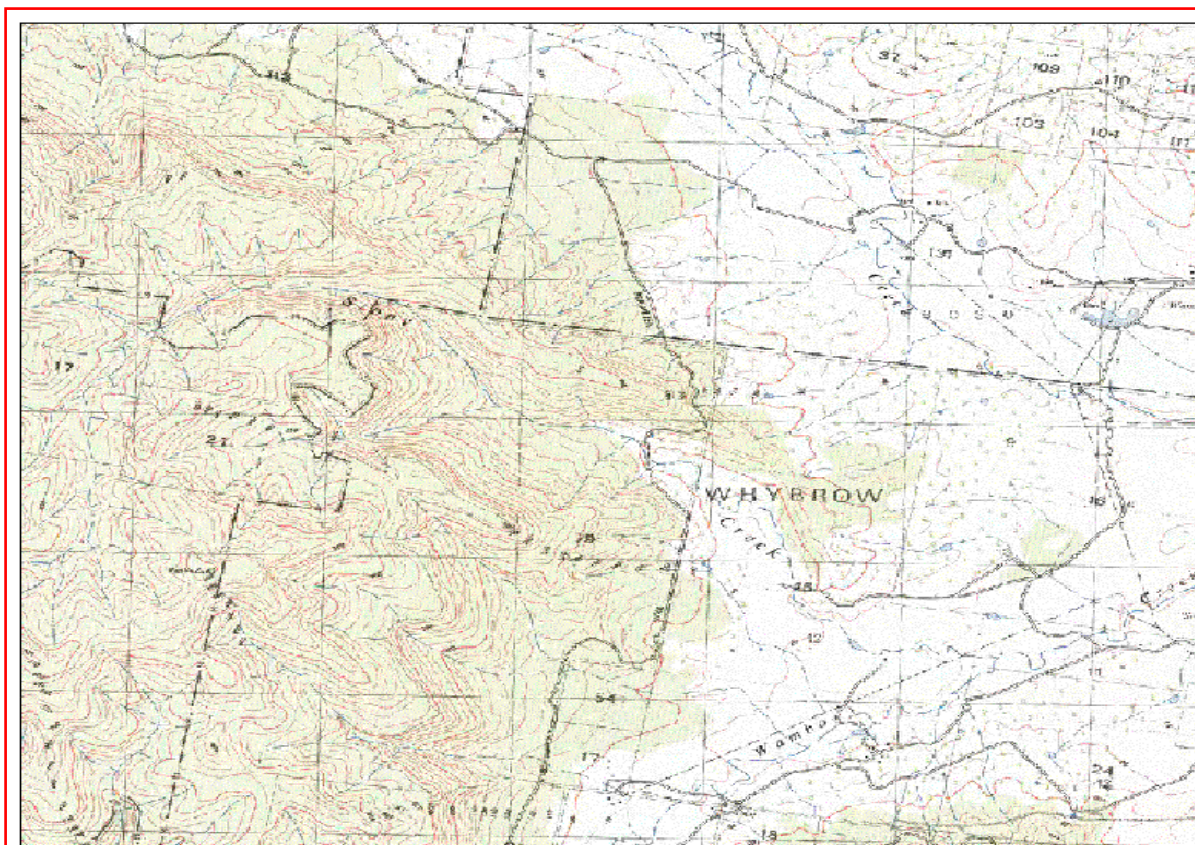
Attention: Cultural Heritage Team Administrator

Email: clh@rpsgroup.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 305547 - 311610, Northings : 6390500 - 6393655 with a Buffer of 0 meters, conducted by Cultural Heritage Team Administrator on 21 May 2014.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

107	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

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- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

RPS Australia East Pty Ltd -Hamilton

Date: 21 May 2014

Accounts Payable Fortitude Valley PO Box 237

Brisbane Queensland 4006

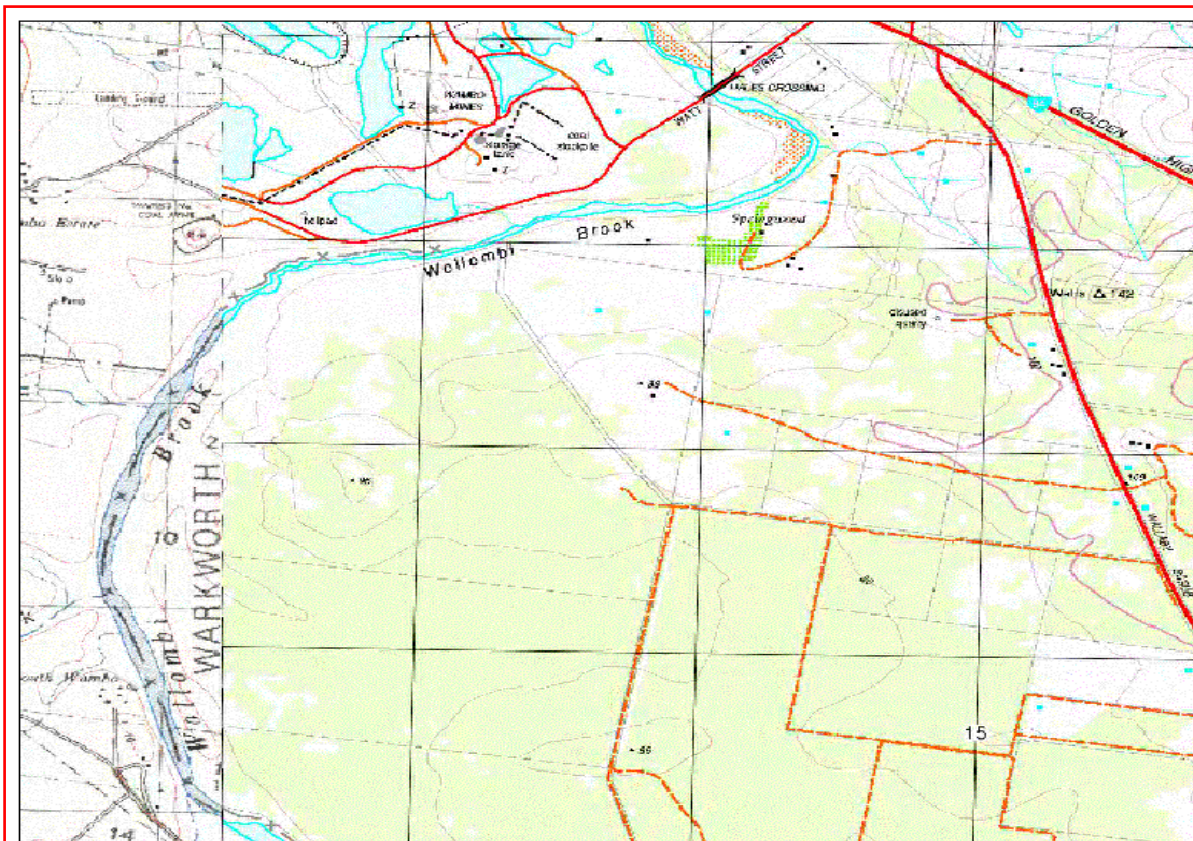
Attention: Cultural Heritage Team Administrator

Email: clh@rpsgroup.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 311610 - 315730, Northings : 6390500 - 6393650 with a Buffer of 0 meters, conducted by Cultural Heritage Team Administrator on 21 May 2014.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

117	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

RPS Australia East Pty Ltd -Hamilton

Date: 25 June 2014

Accounts Payable Fortitude Valley PO Box 237

Brisbane Queensland 4006

Attention: Jeremy Hill

Email: jeremy.hill@rpsgroup.com.au

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Datum :GDA, Zone : 56, Eastings : 310185 - 312177,
Northings : 6390152 - 6392196 with a Buffer of 0 meters, conducted by Jeremy Hill on 25 June 2014.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

38	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(http://www.nsw.gov.au/gazette\)](http://www.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-0056	Wollombi Brook 03	AGD	56	314030	6389700	Open site	Valid	Ceremonial Ring (Stone or Earth) : -, Modified Tree (Carved or Scarred) : -	Bora/Ceremonial,C arved Tree	98716
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-1102	Wambo site 3	AGD	56	313759	6389325	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-1103	Site 1 GG	AGD	56	313840	6388020	Open site	Valid	Grinding Groove : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-1104	Wambo site 4	AGD	56	313408	6389321	Open site	Valid	Grinding Groove : -, Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-1105	Wambo site 5	AGD	56	313091	6389512	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-1106	Wambo site 6	AGD	56	313090	6389587	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-1107	Wambo site 7	AGD	56	313558	6389721	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-1782	151;	AGD	56	313254	6390045	Open site	Valid	Artefact : 1		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-2304	MTW-5	GDA	56	315719	6387903	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-2305	MTW-6	GDA	56	315503	6387903	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-2308	MTW-9	GDA	56	314141	6387797	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-2309	MTW-10	GDA	56	314125	6387884	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-2310	MTW-11	GDA	56	314385	6387915	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-2311	MTW-12	GDA	56	315264	6387830	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-2312	MTW-13	GDA	56	314434	6387928	Open site	Valid	Aboriginal Resource and Gathering : -		
	<u>Contact</u>									
	<u>Recorders</u>									

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 304247 - 315731, Northings : 6387345 - 6390500 with a Buffer of 0 meters. Additional Info : Background reporting. Number of Aboriginal sites and Aboriginal objects found is 118

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-2313	MTW-14	GDA	56	314299	6388070	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact									Permits
37-6-2314	MTW-15	GDA	56	314162	6388742	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2315	MTW-16	GDA	56	314169	6388602	Open site	Valid	Stone Arrangement : -		
	Contact									Permits
37-6-2316	MTW-17	GDA	56	314175	6388552	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2317	MTW-18	GDA	56	314216	6388220	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2318	MTW-19	GDA	56	314060	6388250	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2319	MTW-20	GDA	56	314076	6388293	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2320	MTW-21	GDA	56	314102	6388307	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2321	MTW-22	GDA	56	314055	6388614	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2322	MTW-23	GDA	56	314462	6388590	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2323	MTW-24	GDA	56	314724	6388431	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2324	MTW-25	GDA	56	313835	6389479	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2325	MTW-26	GDA	56	314233	6389200	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2326	MTW-27	GDA	56	314239	6389061	Open site	Valid	Artefact : -		
	Contact									Permits
37-6-2327	MTW-28	GDA	56	314316	6389292	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact									Permits
37-6-2329	MTW-30	GDA	56	314584	6388687	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 304247 - 315731, Northings : 6387345 - 6390500 with a Buffer of 0 meters. Additional Info : Background reporting. Number of Aboriginal sites and Aboriginal objects found is 118

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2330	MTW-31	GDA	56	314453	6389098	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2331	MTW-32	GDA	56	314508	6389425	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2332	MTW-33	GDA	56	314651	6389030	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2333	MTW-34	GDA	56	314766	6389433	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2334	MTW-35	GDA	56	315005	6388618	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2335	MTW-36	GDA	56	315243	6388511	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2336	MTW-37	GDA	56	315383	6388223	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2337	MTW-38	GDA	56	315375	6388542	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2338	MTW-39	GDA	56	314917	6389013	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2339	MTW-40	GDA	56	314949	6388913	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2340	MTW-41	GDA	56	314887	6388662	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2341	MTW-42	GDA	56	315052	6388995	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2342	MTW-43	GDA	56	315070	6389090	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2343	MTW-44	GDA	56	315178	6388968	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2344	MTW-45	GDA	56	315180	6388649	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2345	MTW-46	GDA	56	315246	6388730	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 304247 - 315731, Northings : 6387345 - 6390500 with a Buffer of 0 meters. Additional Info : Background reporting. Number of Aboriginal sites and Aboriginal objects found is 118

This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-2346	MTW-47	GDA	56	315549	6388927	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2347	MTW-48	GDA	56	315584	6388934	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2368	MTW-69	GDA	56	315722	6389639	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2369	MTW-70	GDA	56	315609	6389564	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2370	MTW-71	GDA	56	315645	6389607	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2371	MTW-72	GDA	56	315659	6389689	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2388	MTW-89	GDA	56	315726	6389663	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2389	MTW-90	GDA	56	315574	6389723	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2390	MTW-91	GDA	56	315393	6389847	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2391	MTW-92	GDA	56	315296	6389634	Open site	Valid	Art (Pigment or Engraved) : -, Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2435	MTW-136	GDA	56	314431	6389593	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2436	MTW-137	GDA	56	314566	6389841	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2708	WS12;	GDA	56	314742	6388206	Open site	Valid	Artefact : -, Modified Tree (Carved or Scarred) : -		
	Contact	Recorders		Mr.Luke Godwin				Permits		
37-6-2709	WS13	GDA	56	315717	6387903	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Luke Godwin				Permits		
37-6-2522	MTW-224-WSW-09-53	GDA	56	315178	6387567	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Helen Selimiotis				Permits		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 304247 - 315731, Northings : 6387345 - 6390500 with a Buffer of 0 meters. Additional Info : Background reporting. Number of Aboriginal sites and Aboriginal objects found is 118

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-2523	MTW-225-WSW-09-54	GDA	56	315184	6387793	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2525	MTW-227-WSW-09-33	GDA	56	314642	6387544	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2526	MTW-228-WSW-09-34	GDA	56	314650	6387684	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2529	MTW-232-WSW-09-20	GDA	56	314058	6387369	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2534	MTW-237-WSW-09-10	GDA	56	314004	6387536	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2535	MTW-238-WSW-09-10	GDA	56	313950	6387557	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2536	MTW-239-WSW-09-10	GDA	56	314036	6387555	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2537	MTW-240-WSW-09-10	GDA	56	314004	6387602	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2538	MTW-241-WSW-09-10	GDA	56	313949	6387624	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2524	MTW-226-WSW-09-8	GDA	56	315064	6387466	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2564	MTW-269-WSW-09-24	GDA	56	313959	6388649	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 304247 - 315731, Northings : 6387345 - 6390500 with a Buffer of 0 meters. Additional Info : Background reporting. Number of Aboriginal sites and Aboriginal objects found is 118

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-2572	MTW-277-WSW-09-24	GDA	56	313975	6388527	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact									Recorders Ms.Helen Selimiotis
37-6-2539	MTW-242-WSW-09-10	GDA	56	313922	6387755	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		Permits
	Contact									Recorders Ms.Helen Selimiotis
37-6-2540	MTW-243-WSW-09-10	GDA	56	313916	6387731	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		Permits
	Contact									Recorders Ms.Helen Selimiotis
37-6-2541	MTW-244-WSW-09	GDA	56	313903	6387706	Open site	Valid	Artefact : -		Permits
	Contact									Recorders Ms.Helen Selimiotis
37-6-2542	MTW-245-WSW-09-10	GDA	56	313909	6387678	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		Permits
	Contact									Recorders Ms.Helen Selimiotis
37-6-2543	MTW-246-WSW-09-10	GDA	56	313921	6387648	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		Permits
	Contact									Recorders Ms.Helen Selimiotis
37-6-2544	MTW-247-WSW-09-10	GDA	56	313965	6387723	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		Permits
	Contact									Recorders Ms.Helen Selimiotis
37-6-2545	MTW-248-WSW-09-10	GDA	56	313973	6387701	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		Permits
	Contact									Recorders Ms.Helen Selimiotis
37-6-2546	MTW-249-WSW-09-10	GDA	56	313944	6387693	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		Permits
	Contact									Recorders Ms.Helen Selimiotis
37-6-2547	MTW-250-WSW-09-10	GDA	56	313976	6387671	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		Permits
	Contact									Recorders Ms.Helen Selimiotis

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 304247 - 315731, Northings : 6387345 - 6390500 with a Buffer of 0 meters. Additional Info : Background reporting. Number of Aboriginal sites and Aboriginal objects found is 118

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-2548	MTW-251-WSW-09-10	GDA	56	313982	6387651	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Helen Selimiotis Permits							
37-6-2549	MTW-252-WSW-09-20	GDA	56	314007	6387418	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Helen Selimiotis Permits							
37-6-2550	MTW-253-WSW-09-20	GDA	56	314026	6387374	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Helen Selimiotis Permits							
37-6-2551	MTW-254-WSW-09-20	GDA	56	314002	6387393	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Helen Selimiotis Permits							
37-6-2552	MTW-255-WSW-09-20	GDA	56	314012	6387389	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Helen Selimiotis Permits							
37-6-2553	MTW-256-WSW-09-22	GDA	56	314003	6388171	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Helen Selimiotis Permits							
37-6-2554	MTW-258-WSW-09-21	GDA	56	313921	6387870	Open site	Valid	Potential Archaeological Deposit (PAD) : -, Modified Tree (Carved or Scarred) : -		
	Contact	Recorders	Ms.Helen Selimiotis Permits							
37-6-2555	MTW-260-WSW-09-21	GDA	56	313906	6387890	Open site	Valid	Burial : -, Earth Mound : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Helen Selimiotis Permits							
37-6-2556	MTW-261-WSW-09-21	GDA	56	313935	6387846	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	Contact	Recorders	Ms.Helen Selimiotis Permits							

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-2557	MTW-262-WSW-09-21	GDA	56	313937	6387915	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Permits</u>		
37-6-2558	MTW-263-WSW-09-21	GDA	56	313927	6387929	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Permits</u>		
37-6-2559	MTW-264-WSW-09-21	GDA	56	313916	6387951	Open site	Valid	Potential Archaeological Deposit (PAD) : -, Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>							<u>Permits</u>		
37-6-2560	MTW-265-WSW-09-21	GDA	56	313965	6388178	Open site	Valid	Artefact : -, Grinding Groove : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Permits</u>		
37-6-2561	MTW-266-WSW-09-22	GDA	56	313971	6388180	Open site	Valid	Artefact : -, Grinding Groove : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Permits</u>		
37-6-2562	MTW-267-WSW-09-22	GDA	56	313945	6388220	Open site	Valid	Grinding Groove : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Permits</u>		
37-6-2563	MTW-268-WSW-09-23	GDA	56	313909	6388285	Open site	Valid	Grinding Groove : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Permits</u>		
37-6-2565	MTW-270-WSW-09-24	GDA	56	313988	6388656	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>							<u>Permits</u>		

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-2566	MTW-271-WSW-09-24	GDA	56	313988	6388627	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2567	MTW-272-WSW-09-24	GDA	56	314019	6388620	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2568	MTW-273-WSM-09-24	GDA	56	313986	6388590	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2569	MTW-274-WSW-09-24	GDA	56	313986	6388577	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2570	MTW-275-WSW-09-24	GDA	56	313987	6388556	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2571	MTW-276	GDA	56	313966	6388553	Open site	Valid	Artefact : -, Potential Archaeological Deposit (PAD) : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2573	MTW-278-WSW-09-61	GDA	56	314001	6388368	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2574	MTW-279-WSW-09-62	GDA	56	314003	6388314	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2575	MTW-280-WSW-09-62	GDA	56	314006	6388287	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-6-2576	MTW-281-WSW-09-62	GDA	56	314004	6388258	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>	Ms.Helen Selimiotis <u>Permits</u>							
37-5-0194	SW 2 (Story Creek)	AGD	56	309390	6389550	Open site	Valid	Artefact : -	Open Camp Site	828,1831,1971, 2001,2203
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich <u>Permits</u>							
37-5-0195	SW 3 (Story Creek)	AGD	56	310400	6390030	Open site	Valid	Artefact : -	Open Camp Site	828,1831,1971, 2001,2203
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich <u>Permits</u>							

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 304247 - 315731, Northings : 6387345 - 6390500 with a Buffer of 0 meters. Additional Info : Background reporting. Number of Aboriginal sites and Aboriginal objects found is 118

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108543-3 Poly 3

Client Service ID : 135509

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-0055	Wollombi Brook 04	AGD	56	314207	6387832	Open site	Valid	Ceremonial Ring (Stone or Earth) :-	Bora/Ceremonial	98716
	<u>Contact</u>									
	<u>Recorders</u>									
37-5-0193	SC 1 (Story Creek)	AGD	56	309280	6389540	Open site	Valid	Artefact : -	Open Camp Site	828,1831,1971, 2001,2203
	<u>Contact</u>									
	<u>Recorders</u>									
37-5-0196	Harris House site	AGD	56	310830	6390230	Open site	Valid	Artefact : -	Open Camp Site	828,1831,1971, 2001,2203
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-1455	Wambo site 8	AGD	56	313523	6389819	Open site	Valid	Artefact : 3		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-2942	MTW-521	GDA	56	314591	6389054	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									
37-6-2943	MTW-522	GDA	56	314488	6389074	Open site	Valid	Artefact : -		
	<u>Contact</u>									
	<u>Recorders</u>									

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 304247 - 315731, Northings : 6387345 - 6390500 with a Buffer of 0 meters. Additional Info : Background reporting. Number of Aboriginal sites and Aboriginal objects found is 118

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3a

Client Service ID : 135513

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-5-0305	Wambo site 62	AGD	56	310800	6391300	Open site	Valid	Artefact : 20		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0306	Wambo site 63	AGD	56	309831	6391666	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0436	Wambo site 215	AGD	56	308230	6391760	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0307	Wambo site 64	AGD	56	309693	6391618	Open site	Valid	Artefact : 2		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0308	Wambo site 65	AGD	56	309628	6391605	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0302	Wambo site 59	AGD	56	310229	6391059	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0303	Wambo site 60	AGD	56	310163	6391085	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0309	Wambo site 66	AGD	56	309599	6391659	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0310	Wambo site 67	AGD	56	309521	6391665	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0311	Wambo site 68	AGD	56	309521	6391512	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0312	Wambo site 69	AGD	56	309524	6391344	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0313	Wambo site 70	AGD	56	309454	6391455	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0314	Wambo site 71	AGD	56	309408	6391543	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0315	Wambo site 72	AGD	56	309368	6391615	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0316	Wambo site 73	AGD	56	309273	6391464	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0317	Wambo site 81	AGD	56	308989	6391928	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0319	Wambo site 82	AGD	56	308895	6391996	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 305547 - 311610, Northings : 6390500 - 6393655 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 107

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3a

Client Service ID : 135513

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-5-0320	Wambo site 83	AGD	56	308645	6392196	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0304	Wambo site 61	AGD	56	310154	6391135	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0321	Wambo site 84	AGD	56	308607	6392224	Open site	Valid	Artefact : 2		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0293	Wambo site 45	AGD	56	310130	6390500	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Tessa Corkill				<u>Permits</u>	2222,3130	
37-5-0294	Wambo site 46	AGD	56	310258	6390708	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0295	Wambo site 52	AGD	56	309814	6390918	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0296	Wambo site 53	AGD	56	309924	6391151	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0297	Wambo site 54	AGD	56	309920	6391063	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0298	Wambo site 55	AGD	56	310033	6391044	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0299	Wambo site 56	AGD	56	309936	6390934	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0300	Wambo site 57	AGD	56	310050	6390963	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0301	Wambo site 58	AGD	56	310097	6390877	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0367	Wambo site 137	AGD	56	308740	6392965	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0369	Wambo site 138	AGD	56	308935	6393136	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0344	Wambo site 132	AGD	56	309304	6392849	Open site	Valid	Artefact : 10		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0347	Wambo site 133	AGD	56	309275	6392884	Open site	Valid	Artefact : 11		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0377	Wambo site 139	AGD	56	308820	6393191	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 305547 - 311610, Northings : 6390500 - 6393655 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 107

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3a

Client Service ID : 135513

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-5-0380	Wambo site 140	AGD	56	308703	6393134	Open site	Valid	Artefact : 9		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0334	Wambo site 130	AGD	56	309550	6393050	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0384	Wambo site 141	AGD	56	308680	6393046	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0385	Wambo site 142	AGD	56	308631	6393055	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0386	Wambo site 143	AGD	56	308571	6393131	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0389	Wambo site 144	AGD	56	308376	6392921	Open site	Valid	Artefact : 3		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0338	Wambo site 131	AGD	56	309402	6392927	Open site	Valid	Artefact : 2		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0351	Wambo site 134	AGD	56	309223	6392896	Open site	Valid	Artefact : 2		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0356	Wambo site 135	AGD	56	309109	6392788	Open site	Valid	Artefact : 4		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0325	Wambo site 128	AGD	56	309394	6392709	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0328	Wambo site 127	AGD	56	309514	6392773	Open site	Valid	Artefact : 2		
	<u>Contact</u>	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0330	Wambo site 129 duplicate of 37-5-0331	AGD	56	309550	6393050	Open site	Deleted	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>		Unknown Author				<u>Permits</u>	2222	
37-5-0331	Wambo site 129 duplicate of 37-5-0330	AGD	56	309550	6393050	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0362	Wambo site 136	AGD	56	309130	6392919	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Laila Haglund				<u>Permits</u>	2222	
37-5-0273	HV 52	AGD	56	310110	6390691	Open site	Valid	Artefact : -	Open Camp Site	97857
	<u>Contact</u>	<u>Recorders</u>		Victor Perry				<u>Permits</u>	2222	
37-5-0483	Wambo site 96	GDA	56	309466	6392189	Open site	Valid	Artefact : 1		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0219	Wambo site 29	AGD	56	310700	6393050	Open site	Valid	Artefact : -	Open Camp Site	
	<u>Contact</u>	<u>Recorders</u>		Mr.Peter Kuskie				<u>Permits</u>	2222	

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3a

Client Service ID : 135513

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-5-0628	WAMBO SITE 353	GDA	56	310338	6391371	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode				Permits		
37-5-0629	WAMBO SITE 352	GDA	56	310502	6391292	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode				Permits		
37-5-0635	WAMBO SITE 360	GDA	56	310149	6391159	Open site	Valid	Modified Tree (Carved or Scarred) : 1		
	Contact	Recorders		Ms.Gillian Goode,RPS - Echuca				Permits		
37-5-0630	WAMBO SITE 338	GDA	56	310241	6390950	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode,RPS - Echuca				Permits		
37-5-0631	WAMBO SITE 347	GDA	56	310227	6391465	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode,RPS - Echuca				Permits		
37-5-0632	WAMBO SITE 348	GDA	56	310071	6391222	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode,RPS - Echuca				Permits		
37-5-0633	WAMBO SITE 349	GDA	56	309858	6390815	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode,RPS - Echuca				Permits		
37-5-0634	WAMBO SITE 351	GDA	56	310178	6391231	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode,RPS - Echuca				Permits		
37-5-0620	WAMBO SITE 356	GDA	56	310230	6391171	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0621	WAMBO SITE 357	GDA	56	310385	6391356	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0622	WAMBO SITE 358	GDA	56	310603	6391034	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0623	WAMBO SITE 361	GDA	56	310993	6392054	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0624	WAMBO SITE 362	GDA	56	311165	6391957	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0625	WAMBO SITE 363	GDA	56	310993	6392054	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0617	Wambo Site 354	GDA	56	310001	6390780	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS Australia East Pty Ltd -Hamilton				Permits		
37-5-0618	Wambo Site 359	GDA	56	310903	6392328	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS Australia East Pty Ltd -Hamilton				Permits		
37-5-0218	Wambo site 3;	AGD	56	311260	6392930	Open site	Valid	Artefact : -	Open Camp Site	

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3a

Client Service ID : 135513

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>	Mr.Peter Kuskie					<u>Permits</u>		
37-5-0189	SC 1;	AGD	56	308650	6391800	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0190	SC 2;	AGD	56	308090	6392000	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0191	SC 3;	AGD	56	308700	6391600	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0192	SC 4 (Story Creek)	AGD	56	309550	6390840	Open site	Valid	Artefact : -	Open Camp Site	828,1831,1971, 2001,2203
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>		
37-5-0172	Wambo site 121-26 NW 3	AGD	56	309850	6392900	Open site	Valid	Artefact : 556	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich,Ms.Elizabeth White					<u>Permits</u>	2222	
37-5-0173	NW 4;	AGD	56	310100	6392830	Open site	Valid	Grinding Groove : -	Axe Grinding Groove	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0175	NW 6;	AGD	56	310030	6392530	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0176	NW 7;	AGD	56	310000	6392290	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0177	NW 8;	AGD	56	310210	6392520	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0178	NW 9;	AGD	56	310310	6392490	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0180	NW 10;	AGD	56	310380	6392420	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0181	NW 11;	AGD	56	310420	6392310	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0182	NW 12;	AGD	56	310500	6392210	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0183	Wambo site 102, 103 & 104 NW 13	AGD	56	310270	6392100	Open site	Valid	Artefact : 78	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0184	NW 14;	AGD	56	310570	6392050	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	
37-5-0185	NW 15;	AGD	56	310730	6392150	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>	Elizabeth Rich					<u>Permits</u>	2222	

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3a

Client Service ID : 135513

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-5-0186	Wambo site 98 NW 16	AGD	56	311030	6392160	Open site	Valid	Artefact : 31	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>		Elizabeth Rich,Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0187	NW 17;	AGD	56	311060	6391970	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	<u>Contact</u>	<u>Recorders</u>		Elizabeth Rich				<u>Permits</u>	2222	
37-5-0474	Wambo sites 86 & 87	GDA	56	308313	6392335	Open site	Valid	Artefact : 2		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0475	Wambo site 88	GDA	56	308085	6392470	Open site	Valid	Artefact : 3		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0476	Wambo site 89	GDA	56	307998	6392516	Open site	Valid	Artefact : 18		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0477	Wambo site 90	GDA	56	308012	6392612	Open site	Valid	Artefact : 1		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0478	Wambo site 91	GDA	56	309063	6392424	Open site	Valid	Artefact : 2		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0479	Wambo site 92	GDA	56	309036	6392242	Open site	Valid	Artefact : 7		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0480	Wambo site 93	GDA	56	309159	6392241	Open site	Valid	Artefact : 3		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0481	Wambo site 94	GDA	56	309306	6392160	Open site	Valid	Artefact : 1		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0482	Wambo site 95	GDA	56	309320	6392177	Open site	Valid	Artefact : 1		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0484	Wambo site 97	GDA	56	309609	6392199	Open site	Valid	Artefact : 27		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0485	Wambo site 105	GDA	56	310050	6391931	Open site	Valid	Artefact : 1		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0486	Wambo site 107	GDA	56	310268	6392325	Open site	Valid	Artefact : 6		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0487	Wambo site 116	GDA	56	309946	6392458	Open site	Valid	Artefact : 9		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0488	Wambo site 118	GDA	56	310050	6392930	Open site	Valid	Artefact : 14		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0489	Wambo site 119	GDA	56	310050	6392930	Open site	Valid	Artefact : 1		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3a

Client Service ID : 135513

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-5-0490	Wambo site 120	GDA	56	309965	6392959	Open site	Valid	Artefact : 1		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>	2222	
37-5-0491	Wambo site 85	GDA	56	308405	6392293	Open site	Valid	Artefact : 1		
	<u>Contact</u> T Russell	<u>Recorders</u>		Ms.Elizabeth White				<u>Permits</u>		
37-5-0563	Wambo PAD E	GDA	56	309924	6392491	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Gillian Goode				<u>Permits</u>		
37-5-0564	Wambo PAD F	GDA	56	309804	6392531	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Gillian Goode				<u>Permits</u>		
37-5-0548	Wambo PAD G	GDA	56	309104	6393291	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	<u>Recorders</u>		Ms.Gillian Goode				<u>Permits</u>		
37-5-0549	Wambo PAD H	GDA	56	309044	6393641	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		102590
	<u>Contact</u>	<u>Recorders</u>		Ms.Gillian Goode				<u>Permits</u>		

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3b

Client Service ID : 135515

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-1128	Wambo site 10	AGD	56	313675	6392075	Open site	Valid	Artefact : -		
	Contact Wamaruah LALC	Recorders		Ms.Elizabeth White				Permits	2222,3130	
37-6-1129	Wambo site 11	AGD	56	313097	6392569	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Elizabeth White				Permits	2222,3130	
37-6-1130	Wambo site 12	AGD	56	313403	6392592	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Elizabeth White				Permits	2222,3130	
37-5-0034	Wambo site 30,31 & Wambo Estate & Wambo 4	AGD	56	311900	6392000	Open site	Valid	Artefact : -	Open Camp Site	318
	Contact	Recorders		Ms.Elizabeth White, Len Dyal				Permits		
37-6-2373	MTW-74	GDA	56	315677	6390984	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2375	MTW-76	GDA	56	315652	6390860	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2376	MTW-77	GDA	56	315523	6390925	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2377	MTW-78	GDA	56	315405	6391498	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2378	MTW-79	GDA	56	315452	6391492	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2379	MTW-80	GDA	56	315272	6391532	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2380	MTW-81	GDA	56	315258	6390812	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2382	MTW-83	GDA	56	315051	6391882	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2383	MS1/MTW-84	GDA	56	314951	6391569	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2384	MS8/MTW-85	GDA	56	314877	6391409	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2385	MTW-86	GDA	56	314901	6391055	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2386	MTW-87	GDA	56	314961	6391439	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2387	MTW-88	GDA	56	314897	6391571	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 311610 - 315730, Northings : 6390500 - 6393650 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 117

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3b

Client Service ID : 135515

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2392	MTW-93	GDA	56	315130	6390621	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2393	MTW-94	GDA	56	315112	6390516	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Toni Massey				Permits		
37-6-2394	MTW-95	GDA	56	314427	6391663	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2395	MTW-96	GDA	56	314361	6391676	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2396	MTW-97	GDA	56	314299	6391666	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2397	MTW-98	GDA	56	314024	6391240	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2398	MTW-99	GDA	56	314091	6392007	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2399	MTW-100	GDA	56	314174	6391641	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2400	MTW-101	GDA	56	314512	6390614	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2401	MTW-102	GDA	56	315402	6391493	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2402	MTW-103	GDA	56	315361	6391501	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2403	MTW-104	GDA	56	314970	6392747	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2404	MTW-105	GDA	56	314835	6392967	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2405	MTW-106	GDA	56	314766	6392900	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2406	MTW-107	GDA	56	314333	6392936	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2407	MTW-108	GDA	56	314157	6392893	Open site	Valid	Artefact : -		
	Contact	Recorders		Mr.Rick Bullers				Permits		
37-6-2408	MTW-109	GDA	56	314710	6393411	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 311610 - 315730, Northings : 6390500 - 6393650 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 117

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3b

Client Service ID : 135515

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2409	MTW-110	GDA	56	314890	6393246	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2410	MTW-111	GDA	56	314985	6393305	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2411	MTW-112	GDA	56	315018	6393253	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2412	MTW-113	GDA	56	314818	6393191	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2413	MTW-114	GDA	56	314827	6393142	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2414	MTW-115	GDA	56	314796	6393138	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2415	MTW-116	GDA	56	314771	6393072	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2416	MTW-117	GDA	56	314940	6393020	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2417	MTW-118	GDA	56	314872	6392955	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2418	MTW-119	GDA	56	314811	6392986	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2419	MTW-120	GDA	56	314734	6393034	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2420	MTW-121	GDA	56	314642	6393262	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2421	MTW-122	GDA	56	314663	6393233	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2422	MTW-123	GDA	56	314776	6393048	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2423	MTW-124	GDA	56	315210	6392674	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2424	MTW-125	GDA	56	315177	6392522	Open site	Valid	Artefact : -		
	Contact	Recorders	Mr.Rick Bullers					Permits		
37-6-2425	MTW-126	GDA	56	315215	6392652	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 311610 - 315730, Northings : 6390500 - 6393650 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 117

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3b

Client Service ID : 135515

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	Contact	Recorders						Permits		
37-6-2426	MTW-127	GDA	56	314292	6392560	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2300	PN3	GDA	56	315559	6391855	Open site	Destroyed	Artefact : 1		
	Contact	Recorders						Permits	3454	
37-6-2429	MTW-130	GDA	56	315324	6390598	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2430	MTW-131	GDA	56	314404	6392172	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2431	MTW-132	GDA	56	314373	6392321	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2432	MTW-133	GDA	56	314573	6392272	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2433	MTW-134	GDA	56	314521	6392343	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2434	MTW-135	GDA	56	314394	6392335	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2607	MTW-313	GDA	56	315308	6392992	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2608	MTW-317	GDA	56	315571	6392845	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2609	MTW-318	GDA	56	315377	6393368	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2610	MTW-319	GDA	56	315354	6392994	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2612	MTW-322	GDA	56	315726	6392239	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	Recorders						Permits		
37-6-2613	MTW-323	GDA	56	315703	6392244	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	Contact	Recorders						Permits		
37-6-2615	MTW-325	GDA	56	315558	6393245	Open site	Valid	Artefact : -		
	Contact	Recorders						Permits		
37-6-2616	MTW-326	GDA	56	315512	6393359	Open site	Valid	Artefact : -		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 311610 - 315730, Northings : 6390500 - 6393650 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 117

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3b

Client Service ID : 135515

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2617	MTW-327	GDA	56	315548	6393326	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2618	MTW-328	GDA	56	315650	6393182	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2621	PN6/MTW-331	GDA	56	315686	6392883	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2694	MTW-413	GDA	56	315689	6392228	Open site	Valid	Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2705	PN4	GDA	56	315279	6392504	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2706	PN5 (N)	GDA	56	315279	6392620	Open site	Valid	Artefact : -, Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2707	WS10;	GDA	56	314900	6391054	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2710	WS2;	GDA	56	315636	6391331	Open site	Valid	Artefact : -, Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2712	WS6;	GDA	56	314366	6391652	Open site	Valid	Artefact : -, Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2713	WS7;	GDA	56	314700	6391272	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2714	WS9;	GDA	56	314892	6391509	Open site	Valid	Artefact : -, Modified Tree (Carved or Scarred) : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-1270	W36	AGD	56	315190	6392495	Open site	Valid	Artefact : 2		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-1451	JP 35	AGD	56	315000	6393329	Open site	Valid	Artefact : -		
	<u>Contact</u> T Russell	<u>Recorders</u>						<u>Permits</u>		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 311610 - 315730, Northings : 6390500 - 6393650 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 117

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3b

Client Service ID : 135515

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-6-1300	W64	AGD	56	315165	6392805	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Neville Baker							
37-6-1250	W23	AGD	56	315485	6391435	Open site	Destroyed	Artefact : 2		
	Contact	Recorders	Mr.Neville Baker,Rio Tinto Coal & Allied							
37-6-1252	W24	AGD	56	315480	6391570	Open site	Destroyed	Artefact : 1		
	Contact	Recorders	Mr.Neville Baker,Rio Tinto Coal & Allied							
37-6-1259	W28	AGD	56	315155	6392855	Open site	Valid	Artefact : 2		
	Contact	Recorders	Mr.Neville Baker							
37-6-1267	W34	AGD	56	315400	6392620	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Neville Baker							
37-6-1268	W35	AGD	56	315290	6392505	Open site	Valid	Artefact : 1		
	Contact	Recorders	Mr.Neville Baker							
37-6-1239	W70	AGD	56	315140	6392510	Open site	Valid	Artefact : -		98448
	Contact	Recorders	Mr.Neville Baker							
37-6-1241	W71	AGD	56	315180	6392330	Open site	Valid	Artefact : -		98448
	Contact	Recorders	Mr.Neville Baker							
37-5-0619	Wambo Site 337	GDA	56	311664	6392008	Open site	Valid	Artefact : 1		
	Contact	Recorders	RPS - Echuca							
37-5-0637	Wambo Site 329	GDA	56	311989	6392176	Open site	Valid	Grinding Groove : 1		
	Contact	Recorders	Ms.Gillian Goode,RPS Australia East Pty Ltd -Hamilton							
37-5-0638	Wambo Site 330	GDA	56	311825	6391572	Open site	Valid	Grinding Groove : 1		
	Contact	Recorders	Ms.Gillian Goode,RPS Australia East Pty Ltd -Hamilton							
37-5-0639	Wambo Site 331	GDA	56	311820	6391568	Open site	Valid	Grinding Groove : 1		
	Contact	Recorders	Ms.Gillian Goode,RPS Australia East Pty Ltd -Hamilton							
37-5-0640	Wambo Site 332	GDA	56	311753	6391537	Open site	Valid	Grinding Groove : 1		
	Contact	Recorders	Ms.Gillian Goode,RPS Australia East Pty Ltd -Hamilton							
37-5-0188	NW 18;	AGD	56	311720	6391680	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	Contact	Recorders	Elizabeth Rich							
37-6-0595	Red Pow 1	AGD	56	313650	6393190	Open site	Valid	Artefact : -	Open Camp Site	2464
	Contact	Recorders	Sue Effenberger							
37-5-0318	Wambo site 9	AGD	56	312318	6390347	Open site	Valid	Artefact : -		
	Contact	Recorders	Ms.Elizabeth White							
37-6-2074	Wambo PAD C	GDA	56	313904	6392631	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 311610 - 315730, Northings : 6390500 - 6393650 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 117

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3b

Client Service ID : 135515

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-5-0562	Wambo PAD A	GDA	56	312134	6391541	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2076	Wambo PAD D	GDA	56	314004	6392741	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2936	MTW-514	GDA	56	314745	6393543	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2937	MTW-515	GDA	56	314797	6393546	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2938	MTW-516	GDA	56	314929	6393063	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2939	MTW-517	GDA	56	314921	6393057	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2940	MTW-519	GDA	56	314741	6393110	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2941	MTW-520	GDA	56	315213	6393238	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2923	MTW-506	GDA	56	314599	6393476	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2924	MTW-505	GDA	56	314745	6393485	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2925	MTW-507	GDA	56	314641	6393545	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2926	MTW-508	GDA	56	314645	6393536	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2927	MTW-509	GDA	56	314616	6393555	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2928	MTW-510	GDA	56	314668	6393572	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2929	MTW-511	GDA	56	314710	6393563	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2930	MTW-512	GDA	56	314740	6393557	Open site	Valid	Artefact : 1		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 311610 - 315730, Northings : 6390500 - 6393650 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 117

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : PR108453-3 Poly 3b

Client Service ID : 135515

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-6-2931	MTW-513	GDA	56	314738	6393542	Open site	Valid	Artefact : 1		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-5-0642	Wambo Site 334	GDA	56	311817	6391853	Open site	Valid	Artefact : -, Earth Mound : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-5-0643	Wambo Site 335	GDA	56	311833	6391861	Open site	Valid	Earth Mound : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		
37-5-0644	Wambo Site 336	GDA	56	311712	6391696	Open site	Valid	Artefact : -		
	<u>Contact</u>	<u>Recorders</u>						<u>Permits</u>		

Report generated by AHIMS Web Service on 21/05/2014 for Cultural Heritage Team Administrator for the following area at Datum :GDA, Zone : 56, Eastings : 311610 - 315730, Northings : 6390500 - 6393650 with a Buffer of 0 meters. Additional Info : Background info. Number of Aboriginal sites and Aboriginal objects found is 117

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 108453-3JH

Client Service ID : 139585

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-5-0305	Wambo site 62	AGD	56	310800	6391300	Open site	Valid	Artefact : 20		
	Contact	Recorders	Ms.Elizabeth White Permits 2222							
37-5-0302	Wambo site 59	AGD	56	310229	6391059	Open site	Valid	Artefact : -		
	Contact	Recorders	Ms.Laila Haglund Permits 2222							
37-5-0303	Wambo site 60	AGD	56	310163	6391085	Open site	Valid	Artefact : -		
	Contact	Recorders	Ms.Laila Haglund Permits 2222							
37-5-0034	Wambo site 30,31 & Wambo Estate & Wambo 4	AGD	56	311900	6392000	Open site	Valid	Artefact : -	Open Camp Site	318
	Contact	Recorders	Ms.Elizabeth White, Len Dyll Permits							
37-5-0304	Wambo site 61	AGD	56	310154	6391135	Open site	Valid	Artefact : 3		
	Contact	Recorders	Ms.Elizabeth White Permits 2222							
37-5-0293	Wambo site 45	AGD	56	310130	6390500	Open site	Valid	Artefact : -		
	Contact	Recorders	Ms.Tessa Corkill Permits 2222,3130							
37-5-0294	Wambo site 46	AGD	56	310258	6390708	Open site	Valid	Artefact : -		
	Contact	Recorders	Ms.Laila Haglund Permits 2222							
37-5-0301	Wambo site 58	AGD	56	310097	6390877	Open site	Valid	Artefact : -		
	Contact	Recorders	Ms.Laila Haglund Permits 2222							
37-5-0273	HV 52	AGD	56	310110	6390691	Open site	Valid	Artefact : -	Open Camp Site	97857
	Contact	Recorders	Victor Perry Permits 2222							
37-5-0195	SW 3 (Story Creek)	AGD	56	310400	6390030	Open site	Valid	Artefact : -	Open Camp Site	828,1831,1971, 2001,2203
	Contact	Recorders	Elizabeth Rich Permits							
37-5-0628	WAMBO SITE 353	GDA	56	310338	6391371	Open site	Valid	Artefact : 1		
	Contact	Recorders	Ms.Gillian Goode Permits							
37-5-0629	WAMBO SITE 352	GDA	56	310502	6391292	Open site	Valid	Artefact : 1		
	Contact	Recorders	Ms.Gillian Goode Permits							
37-5-0619	Wambo Site 337	GDA	56	311664	6392008	Open site	Valid	Artefact : 1		
	Contact	Recorders	RPS - Echuca Permits							
37-5-0637	Wambo Site 329	GDA	56	311989	6392176	Open site	Valid	Grinding Groove : 1		
	Contact	Recorders	Ms.Gillian Goode,RPS Australia East Pty Ltd -Hamilton Permits							
37-5-0638	Wambo Site 330	GDA	56	311825	6391572	Open site	Valid	Grinding Groove : 1		
	Contact	Recorders	Ms.Gillian Goode,RPS Australia East Pty Ltd -Hamilton Permits							
37-5-0639	Wambo Site 331	GDA	56	311820	6391568	Open site	Valid	Grinding Groove : 1		
	Contact	Recorders	Ms.Gillian Goode,RPS Australia East Pty Ltd -Hamilton Permits							
37-5-0640	Wambo Site 332	GDA	56	311753	6391537	Open site	Valid	Grinding Groove : 1		
	Contact	Recorders	Ms.Gillian Goode,RPS Australia East Pty Ltd -Hamilton Permits							

Report generated by AHIMS Web Service on 25/06/2014 for Jeremy Hill for the following area at Datum :GDA, Zone : 56, Eastings : 310185 - 312177, Northings : 6390152 - 6392196 with a Buffer of 0 meters. Additional Info : CHIA. Number of Aboriginal sites and Aboriginal objects found is 38

This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 108453-3JH

Client Service ID : 139585

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-5-0630	WAMBO SITE 338	GDA	56	310241	6390950	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode,RPS - Echuca				Permits		
37-5-0631	WAMBO SITE 347	GDA	56	310227	6391465	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode,RPS - Echuca				Permits		
37-5-0620	WAMBO SITE 356	GDA	56	310230	6391171	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0621	WAMBO SITE 357	GDA	56	310385	6391356	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0622	WAMBO SITE 358	GDA	56	310603	6391034	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0623	WAMBO SITE 361	GDA	56	310993	6392054	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0624	WAMBO SITE 362	GDA	56	311165	6391957	Open site	Valid	Artefact : 1		
	Contact	Recorders		RPS - Echuca				Permits		
37-5-0625	WAMBO SITE 363	GDA	56	310423	6390528	Open site	Valid	Artefact : 1		
	Contact	Recorders		Ms.Gillian Goode				Permits		
37-5-0188	NW 18;	AGD	56	311720	6391680	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	Contact	Recorders		Elizabeth Rich				Permits		
37-5-0196	Harris House site	AGD	56	310830	6390230	Open site	Valid	Artefact : -	Open Camp Site	828,1831,1971, 2001,2203
	Contact	Recorders		Elizabeth Rich				Permits		
37-5-0187	NW 17;	AGD	56	311060	6391970	Open site	Valid	Artefact : -	Open Camp Site	1971,1972
	Contact	Recorders		Elizabeth Rich				Permits	2222	
37-5-0562	Wambo PAD A	GDA	56	312134	6391541	Open site	Valid	Potential Archaeological Deposit (PAD) : 1		
	Contact	Recorders		Ms.Gillian Goode				Permits		
37-5-0647	Wambo Site 371	GDA	56	311482	6391620	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Gillian Goode				Permits		
37-5-0648	Wambo Site 372	GDA	56	311522	6391622	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Gillian Goode				Permits		
37-5-0649	Wambo Site 373	GDA	56	311657	6391547	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Gillian Goode				Permits		
37-5-0650	Wambo Site 374	GDA	56	311619	6391761	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Gillian Goode				Permits		

Report generated by AHIMS Web Service on 25/06/2014 for Jeremy Hill for the following area at Datum :GDA, Zone : 56, Eastings : 310185 - 312177, Northings : 6390152 - 6392196 with a Buffer of 0 meters. Additional Info : CHIA. Number of Aboriginal sites and Aboriginal objects found is 38

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AHIMS Web Services (AWS)

Extensive search - Site list report

Your Ref Number : 108453-3JH

Client Service ID : 139585

SiteID	SiteName	Datum	Zone	Easting	Northing	Context	Site Status	SiteFeatures	SiteTypes	Reports
37-5-0651	Wambo Site 377	GDA	56	311819	6391466	Open site	Valid	Grinding Groove : -		
	Contact	Recorders		Ms.Gillian Goode				Permits		
37-5-0652	Wambo Site 378	GDA	56	311039	6390380	Open site	Valid	Artefact : -		
	Contact	Recorders		Ms.Gillian Goode				Permits		
37-5-0642	Wambo Site 334	GDA	56	311817	6391853	Open site	Valid	Artefact : -, Earth Mound : -		
	Contact	Recorders		RPS Australia East Pty Ltd -Hamilton				Permits		
37-5-0643	Wambo Site 335	GDA	56	311833	6391861	Open site	Valid	Earth Mound : -		
	Contact	Recorders		RPS Australia East Pty Ltd -Hamilton				Permits		
37-5-0644	Wambo Site 336	GDA	56	311712	6391696	Open site	Valid	Artefact : -		
	Contact	Recorders		RPS Australia East Pty Ltd -Hamilton				Permits		

Report generated by AHIMS Web Service on 25/06/2014 for Jeremy Hill for the following area at Datum :GDA, Zone : 56, Eastings : 310185 - 312177, Northings : 6390152 - 6392196 with a Buffer of 0 meters. Additional Info : CHIA. Number of Aboriginal sites and Aboriginal objects found is 38

This information is not guaranteed to be free from error omission. Office of Environment and Heritage (NSW) and its employees disclaim liability for any act done or omission made on the information and consequences of such acts or omission.

Appendix 5

Site Cards

[✓] New recording

[] Additional Info



National Parks and Wildlife Service

Box 1967, Hurstville NSW 2220. Tel: (02) 585 6444.

Standard Site Recording Form Revised 5/88



37-5-0195

1:250,000 map sheet: SINGLETON

NPWS Code

13.7

AMG Grid reference

Full reference - please
include leading digits

250K
310400 mE 6390030 mN
 25K 5/8 25K

Scale of map used for grid reference
Please use largest scale available
☒ 25K, 50K (preferred)
 ☐ 100K
 ☐ 250K
1:25K, 50K, 100K map name: Doyles Creek

HEAD OFFICE USE ONLY:

NPWS Site no: 37-5-195Site types: 2 open siteAccessioned by: Stephen Field Date: 17-4-91Data entered by: Stephen Field Date: 23-4-91Owner/Manager: Mr S. HarrisAddress: South Wanbo
Bulga NSWSite name: SW3

Locality/property name:

NPWS District:

Region:

Reason for investigation

Proposed Underground MiningPortion no: 24Parish: WhybrowPhotos taken? yes

How many attached?

How to get to the site (refer to permanent features, give best approach to site eg. from above, below, along cliff.
(Draw diagram on separate sheet.)

From the Harris House, drive south-west along main road/track for 500m, going through gate. Artefacts are exposed along road. See attached map.

Other sites in locality? yesSite Types include: open sitesAre sites in NPWS Register? yesHave artefacts been removed from site? yesWhen? 1990 for test excavationsBy whom? Rich 1990

Deposited where?

Is site important to local Aborigines?

Give contact(s) name(s) + address(es)

Philip Mare + Barry French
Wanaruah LALC

Contacted for this recording? yes

(Attach additional information separately) If not, why not?

Verbal/written reference sources (including full title of accompanying report).

Corkill T 1990 Preliminary AJS at South Wanbo near WarkworthNPWS Report
Catalogue #C-1931Rich E 1991 Investigation of Sites SW3 + SC4 at South WanboC-2001Checklist:
surface visibility,
damage/disturbance/
threat to site

Condition of site: The site has been damaged by tree clearing, pastoral use, grazing, use + reconstruction of the main access road; and part of the site has been ploughed

Recommendations for management & protection (attach separate sheet if necessary):

Site will probably not be effected by underground mining but it should be monitored during + after mining as a check.

Site recorded by: E RichDate: October 1990Address/institution: 1A Angel RdSmithfield 2135

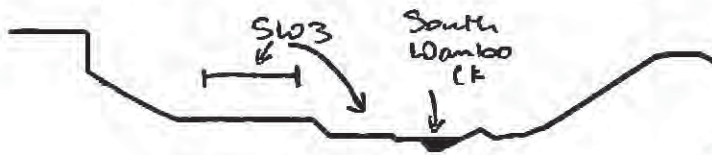
SITE POSITION & ENVIRONMENT

OFFICE USE ONLY: NPWS site no: 37-5-195

1. Land form a. beach/hill slope/ridge top, etc: spur

b. site aspect: North c. slope: gentle

d. mark on diagram provided or on your own sketch the position of the site:



e. Describe briefly: Artifacts occur on flattish spurs above the modern flood plain of South Wambo CK, 100-150m south of the creek.

f. Local rock type: Watts Sandstone
Wollambi Coal Seams

g. Land use/effect: grazing.

2. Distance from drinking water: at site

Source: gullies

3. Resource Zone associated with site (estuarine, riverine, forest etc): probably woodland

4. Vegetation: now cleared pasture with casuarinas along creek

5. Edible plants noted:

6. Faunal resources (include shellfish):

7. Other exploitable resources (river pebbles, ochre, etc):

Site type:

Open
Site

DESCRIPTION OF SITE & CONTENTS.

Note state of preservation of site & contents. Do NOT dig, disturb, damage site or contents.

copy pp 21, 22, 23, 24

map, + description

+ artifact descriptions attached

CHECKLIST TO HELP:

length, width, depth,
height of site, shelter,
deposit, structure,
element eg. tree scar,
grooves in rock.

DEPOSIT: colour,
texture, estimated
depth, stratigraphy,
contents-shell, bone,
stone, charcoal, density
& distribution of these,
stone types, artifact
types.

ART: area of surface
decorated, motifs,
colours, wet, dry
pigment, technique of
engraving, no. of
figures, sizes,
patination.

BURIALS: number &
condition of bone,
position, age, sex,
associated artifacts.

TREES: number, alive,
dead, likely age, scar
shape, position, size,
patterns, axe marks,
regrowth.

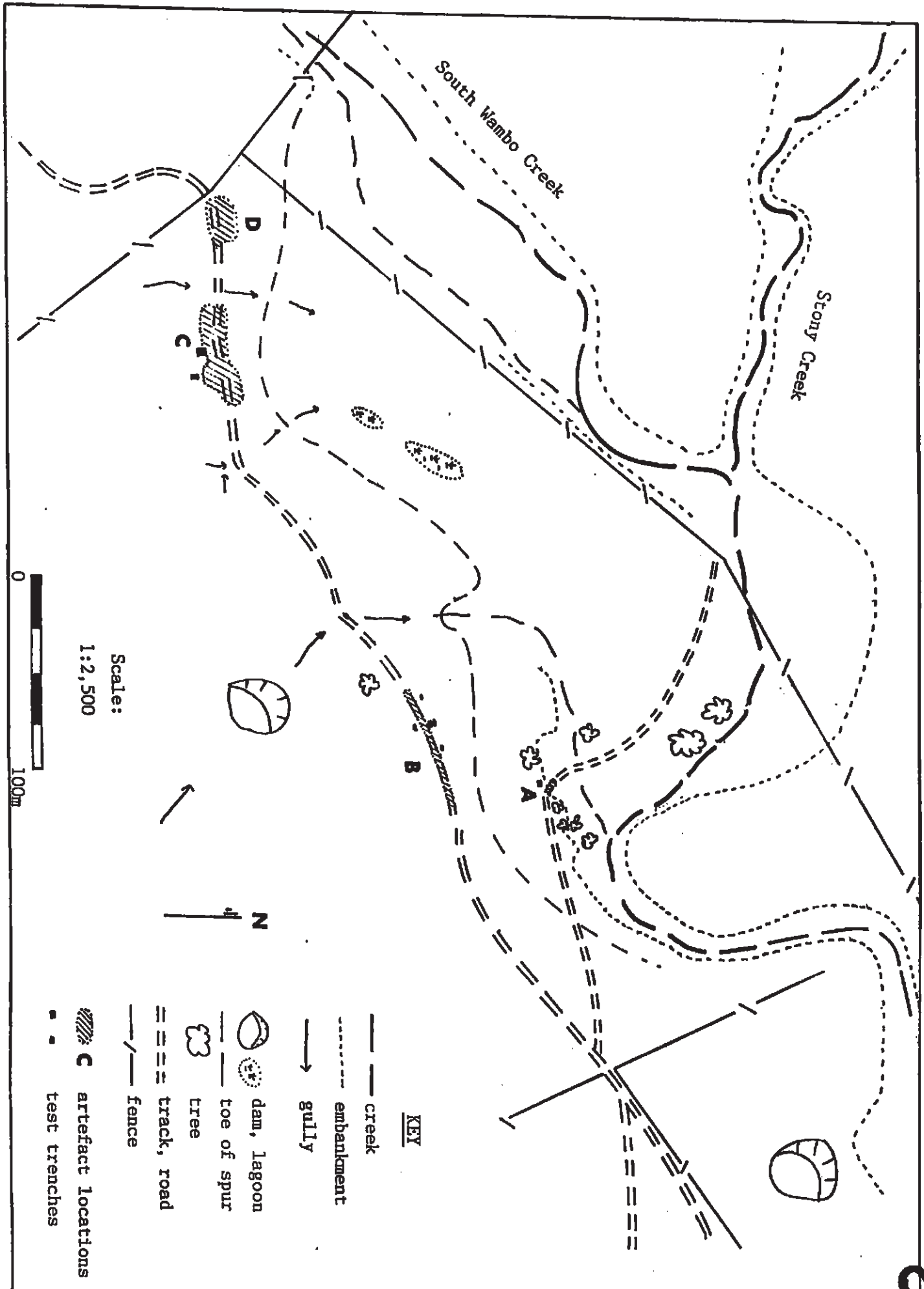
QUARRIES: rock type,
debris, recognisable
artifacts, percentage
quarried.

OTHER SITES EG.
structures (fish traps,
stone arrangements,
bora rings, mia mias),
mythological sites, rock
holes, engraved groove
channels, contact sites
(missions massacres
cemeteries) as
appropriate

Attach sketches etc, eg. plan & section of shelter, show relation between site contents, indicate north, show scale.

Attach annotated photos (stereo where useful) showing scale, particularly for art sites.

Map 3: SW3



7.0 SOUTH WAMBO SITE 3

This section of the report sets out a description of this site, outlines the excavations carried out here, and sets out the results of the excavations. Note that this site was previously named sites 3 and 4 by Corkill (1990), but is now considered to be one large site.

7.1 Description of SW 3

Location: Doyle's Creek grid refs. 3/1040 63/9003 to
3/1072 63/9020

The site is located on the south side of South Wambo Creek about 400m west of the Harris House. Artefacts occur along a spur which is above a floodplain, and parallel to the Creek [see Map 3]. Artefacts were recorded in four locations, called A, B, C and D. The site is located on the Sandy Hollow land system. Locations A and B are on the Watts sandstone, while locations C and D are on undifferentiated sedimentary deposits of the Wollombi Coal Seams.

Extent of the Site

The site may extend over a distance of 350m or more parallel to the Creek. On the east end no artefacts were seen on a vehicle track over a distance of about 125m, between location B and the western edge of the Harris House site, suggesting a discontinuation in archaeological material between these two 'sites'. On the west end, the archaeological material extends to the western boundary of the Harris property. Beyond this a gravel quarry is present which may have destroyed any archaeological material here.

The extent of the site uphill [south] from the Creek was not determined. At Location A artefacts were seen within 40m of South Wambo Creek, and further upslope at location B, they were about 60m from the Creek. At locations C and D they were about 160m from the Creek, but immediately adjacent to the floodplain. It is highly likely that the amount of archaeological material decreases upslope away from South Wambo Creek; a pattern which is common in the Hunter Valley.

Description

At location A, 12 artefacts were seen on a vehicle track which cuts through the top of a flat embankment above the floodplain. At locations B, C, and D artefacts were seen along a road which crosses the end of a spur above the floodplain. The artefact locations were separated by small gullies and short distances [50m] without artefacts. Locations B and C appear to be further apart [150m] but the



Aboriginal Site Recording Form



AHIMS Registrar

PO Box 1967, Hurstville NSW 2220

Office Use Only

Site Number 3 7 - 5 - 0 6 2 5

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Office Use Only

Client on system

☐

Client on system

☐

Geographic Location

Site Name W A M B O S I T E 3 6 3

Easting 3 1 0 4 2 3 Northing 6 3 9 0 5 2 8 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M S G O O D E G I L L I A N

Organisation R P S

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 04/4/2012

Client on system

☐

Open Site

Landform

Slope
 degrees

- ☐ Beach
- ☐ Coastal rock platform
- ☐ Dune
- ☐ Intertidal flat
- ☐ Lagoon
- ☐ Tidal Creek

- ☐ Stream bank
- ☒ Stream channel
- ☐ Swamp
- ☐ Terrace
- ☐ Terrace flat

- ☐ Closed forest
- ☐ Grasslands
- ☐ Isolated clumps of trees
- ☐ Open forest
- ☐ Open woodland
- ☐ Scrub
- ☐ Woodland
- ☒ Cleared
- ☐ Revegetated
- ☐ N/A

- ☐ Conservation
- ☐ Established urban
- ☐ Farming-intensive
- ☒ Farming-low intensity
- ☐ Forestry
- ☐ Industrial
- ☒ Mining
- ☐ Pastoral/grazing
- ☐ Recreation
- ☐ Semi-rural
- ☐ Service corridor
- ☐ Transport corridor
- ☐ Urban expansion
- ☐ Residential

Distance to permanent water source	50	metres
Distance to temporary water source	0	metres
Name of nearest permanent water source	South Wambo Creek	
Name of nearest temporary water	Stony Creek	

Directions for Relocation
see map and GPS co-ordinates

☐ Public National Park / other Government Dept.

☒ Private

I.D.		(I.D. Office Use only)

A blank 10x10 grid map. The grid is composed of 10 columns and 10 rows of squares. The grid is surrounded by a light pink border. The corners of the grid are labeled with compass directions: 'NW' at the top-left, 'NE' at the top-right, 'SW' at the bottom-left, and 'SE' at the bottom-right. The midpoints of the top and bottom edges are labeled 'N' and 'S' respectively. The midpoints of the left and right edges are labeled 'W' and 'E' respectively. A north arrow is located on the right side of the grid, pointing upwards. The arrow is a simple line with a small circle at the tip and a crossbar.

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
☐ Wind erosion
☐ Water erosion
☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Condition of Ceiling

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Shelter Aspect

- ☐ North
☐ North East
☐ East
☐ South East
☐ South
☐ South West
☐ West
☐ North West

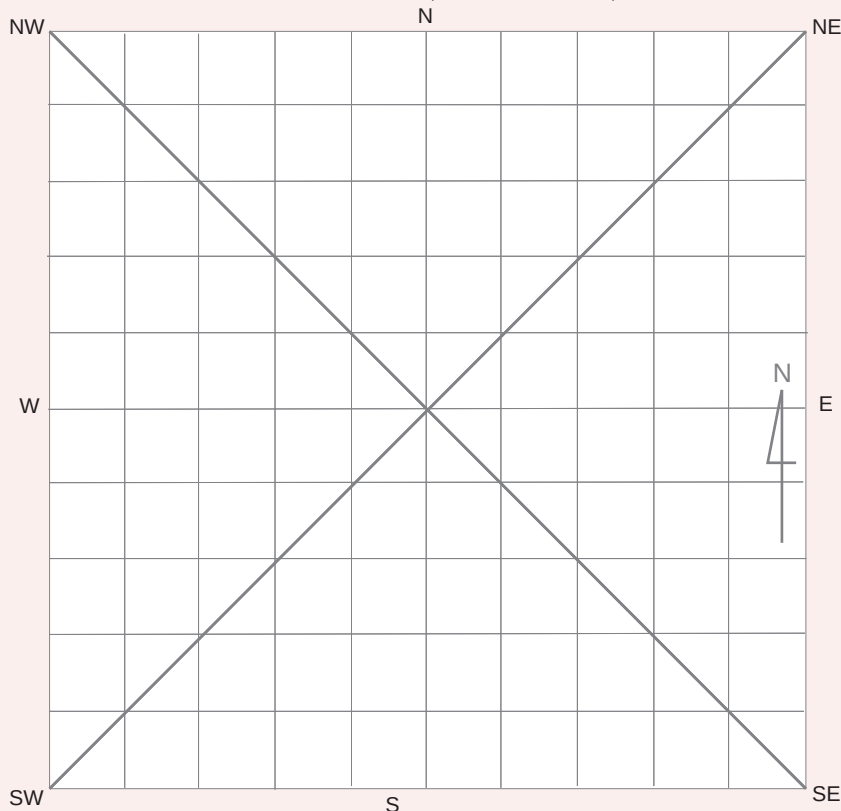
Open Site

Site Orientation

- ☐ N-S
☐ NE-SW
☒ E-W
☐ SE-NW
☐ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
☐ 2. Aboriginal Resource & Gathering
☐ 3. Art
☒ 4. Artefact
☐ 5. Burial
☐ 6. Ceremonial Ring
☐ 7. Conflict
☐ 8. Earth Mound
☐ 9. Fish Trap
☐ 10. Grinding Groove
☐ 11. Habitation Structure
☐ 12. Hearth
☐ 13. Non Human Bone & Organic Material
☐ 14. Ochre quarry
☐ 15. Potential Archaeological Deposit
☐ 16. Stone Quarry
☐ 17. Shell
☐ 18. Stone Arrangement
☐ 19. Modified Tree
☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
 Internal width
 Shelter height
 Shelter floor area

Open Site Dimensions (m)

- 20 Total length of visible site
 5 Average width of visible site
 100 sq m Estimated area of visible site
 Length of assessed site area

This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is a margin at the top, and the entire sheet is framed by a thin black border.

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

If proposed or existing farming or mining activities are likely to impact on the site or cause harm to the Aboriginal objects, it is recommended that the site should be salvaged (subject to an appropriate permit being in force), and the artefacts or objects relocated to the temporary keeping place under the Wambo Care and Control Permit #3130.

[illegible]

☐	A4 location map
☐	B/W photographs
☐	Colour photographs
☐	Slides
☐	Aerial photographs
☐	Site plans, drawings
☐	Recording tables
☐	Other
☐	Feature inserts-No.

This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is a margin at the top, and the paper appears to be part of a notebook or binder, as evidenced by the dark binding edge visible on the left side.

NPWS FEATURE RECORDING FORM - ARTEFACT

page 1

Site I.D.

Site Name

WAMBO SITE 363

First recorded date

4/4/2012

Importance

No. of instances

3

Recorded by

RPS

Yes No

Stone artefacts only

Yes

Artefacts collected

No

Permit issued

No

Percentage of Non-stone Artefacts to Percentage of Stone Artefacts

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% 90-100%

0-9%

Feature Context & Condition

Scatter No.

1

Easting

3 1 0 4 2 3

Northing

6 3 9 0 5 2 8

Density

Dimensions

Yes No

(Artefact count per square metre)

1

20

Length (m)

5

Width (m)

0

Depth (m)

In situ

No

Stratified

No

Feature Condition

General Condition

Recommended Action

☐

Very good

☒

Weathered

☐

Boardwalk

☐

Revegetation

☐

Good

☐

Vehicle damage

☐

Fencing

☐

Signage

☒

Poor

☒

Surface water wash

☐

Closure to public

☐

Soil erosion control

☐

Fire damage

☒

Continued inspection

☐

Track closure/re-routing

☐

Erosion

☐

Fire hazard reduction

☐

Additional recording

☐

Stock damage

☐

Expert assessment

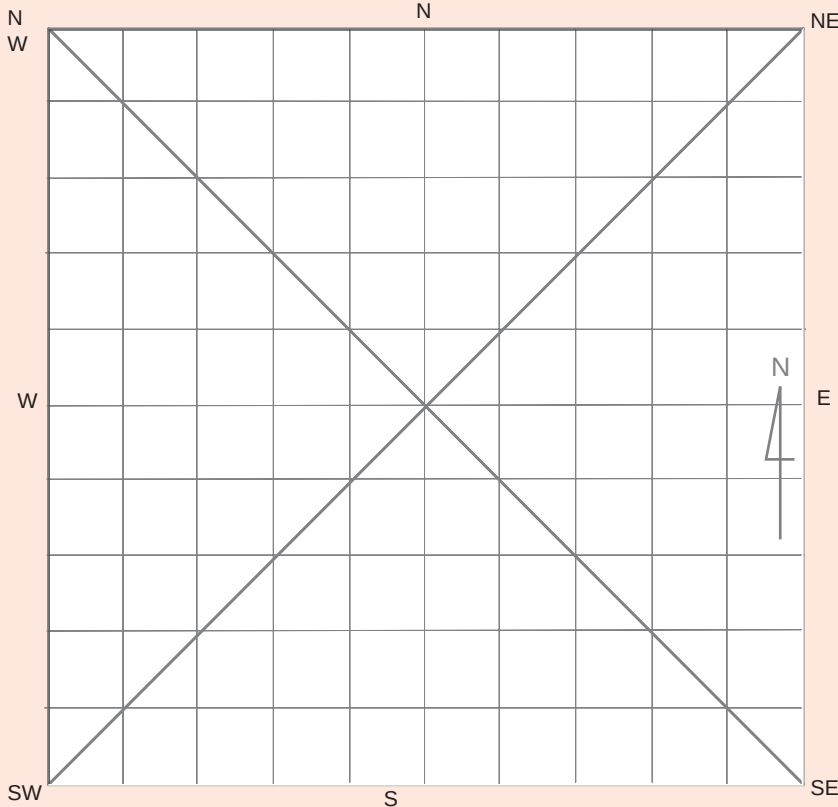
☒

Exposed archaeological material

☐

Meeting with land manager

Feature Plan (Indicate scale, location of instances)



Feature Environment

(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

Land form

Land form unit

Slope

Vegetation

Land use

Water

Distance to permanent water source

metres

Distance to temporary water source

metres

Name of nearest permanent water source

Name of nearest temporary water

Table: Artefact Attributes Wambo Site 363

ID	Artefact Type	Completeness	Raw Material	Colour	Length (mm)	Width (mm)	Thickness (mm)	Weight (grams)	Notes	Location Specified
1	Flake	complete	mudstone	yellow/red	26.08	26.31	7.20	3.7	Retouch/usewear RL. Heat treated.	
2	Flake	complete	mudstone	cream/yellow	54.54	22.97	4.69	7.7	Retouch RL/usewear RL, LL, D. Hinge termination	
3	Flake	complete	mudstone	yellow	27.84	24.34	7.51	4.5	25% cortex. Feather termination	

Site Description

This artefact scatter site was located in the sandy bed of South Wambo Creek. The artefacts would most likely have been washed down from sites further up the creek line. The artefacts were all mudstone.

Photos



Photo: Wambo Site 363 - Artefact 1 yellow/red mudstone flake



Photo: Wambo Site 363 - Artefact 2 cream/yellow mudstone flake



Photo: Wambo Site 363 - Artefact 3 yellow mudstone flake



Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville NSW 2220



Office Use Only

Site Number 3 7 - 5 - 0 6 4 4

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W a m b o S i t e 3 3 6

Easting 3 1 1 7 1 2 Northing 6 3 9 1 6 9 6 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

Organisation

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 10/06/2011

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

Closed Site

A 10x10 grid map with compass directions (N, NE, E, SE, S, SW, W, NW) and a north arrow.

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
- ☐ Wind erosion
- ☐ Water erosion
- ☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Open Site

Site Orientation

- ☐ N-S
- ☐ NE-SW
- ☐ E-W
- ☒ SE-NW
- ☐ N/A

Condition of Ceiling

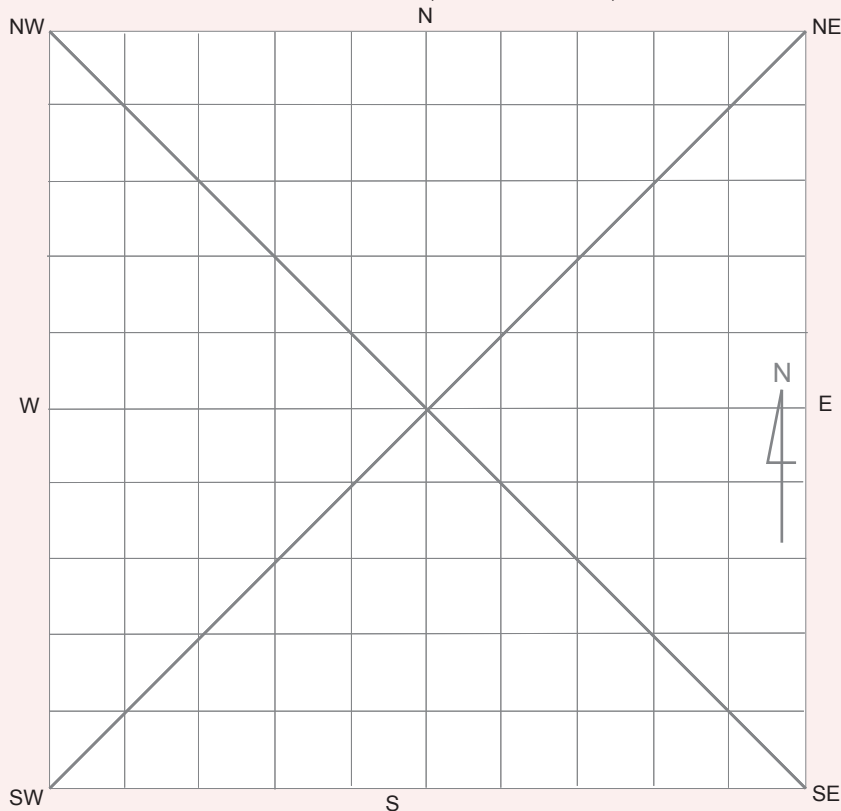
- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Shelter Aspect

- ☐ North
- ☐ North East
- ☐ East
- ☐ South East
- ☐ South
- ☐ South West
- ☐ West
- ☐ North West

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
- ☐ 2. Aboriginal Resource & Gathering
- ☐ 3. Art
- ☒ 4. Artefact
- ☐ 5. Burial
- ☐ 6. Ceremonial Ring
- ☐ 7. Conflict
- ☐ 8. Earth Mound
- ☐ 9. Fish Trap
- ☐ 10. Grinding Groove
- ☐ 11. Habitation Structure
- ☐ 12. Hearth
- ☐ 13. Non Human Bone & Organic Material
- ☐ 14. Ochre quarry
- ☐ 15. Potential Archaeological Deposit
- ☐ 16. Stone Quarry
- ☐ 17. Shell
- ☐ 18. Stone Arrangement
- ☐ 19. Modified Tree
- ☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
- Internal width
- Shelter height
- Shelter floor area

Open Site Dimensions (m)

- 350 Total length of visible site
- 90 Average width of visible site
- Estimated area of visible site
- Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

[illegible]

☐ A4 location map

☐ B/W photographs

☒ Colour photographs

☐ Slides

☐ Aerial photographs

☐ Site plans, drawings

☐ Recording tables

☐ Other

☐ Feature inserts-No.

[illegible]

NPWS FEATURE RECORDING FORM - ARTEFACT

page 1

Site I.D. Site Name First recorded date Importance No. of instances Recorded by

Yes No

Stone artefacts only Artefacts collected Permit issued

Percentage of Non-stone Artefacts to Percentage of Stone Artefacts

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% 90-100%

Feature Context & Condition

Scatter No. Easting Northing

Density

Dimensions

Yes No

(Artefact count per square metre)

Length (m) Width (m)

Depth (m)

In situ

Stratified

Feature Condition

General Condition

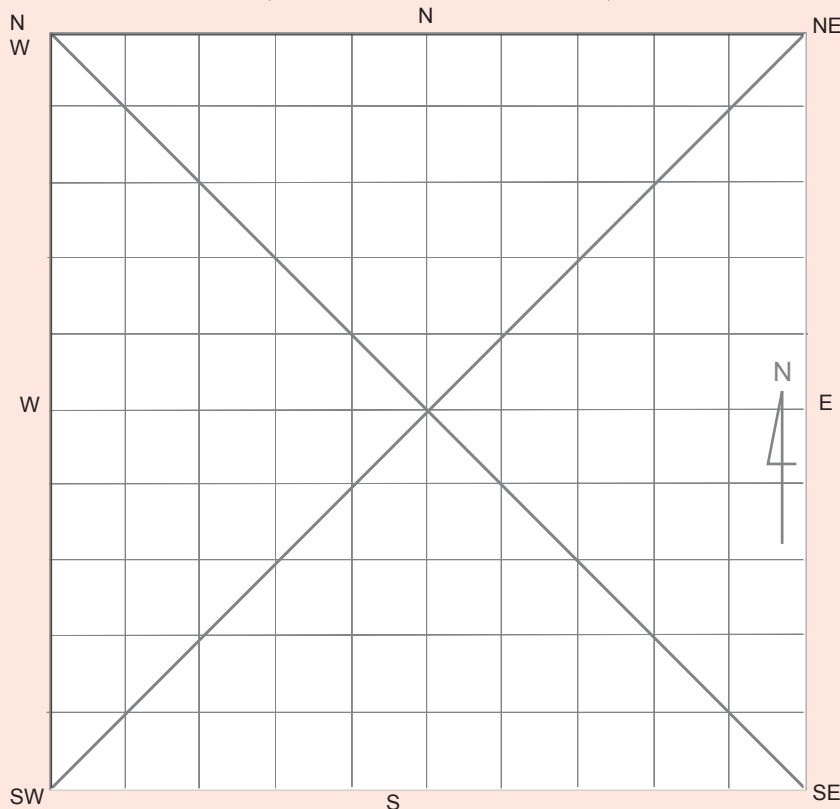
Recommended Action

- ☐ Very good
- ☒ Good
- ☐ Poor

- ☒ Weathered
- ☐ Vehicle damage
- ☒ Surface water wash
- ☐ Fire damage
- ☒ Erosion
- ☒ Stock damage
- ☒ Exposed archaeological material

- ☐ Boardwalk
- ☐ Fencing
- ☐ Closure to public
- ☒ Continued inspection
- ☐ Fire hazard reduction
- ☐ Expert assessment
- ☐ Meeting with land manager
- ☐ Revegetation
- ☐ Signage
- ☐ Soil erosion control
- ☐ Track closure/re-routing
- ☐ Additional recording

Feature Plan (Indicate scale, location of instances)



Feature Environment

(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2) Land form Land form unit Slope Vegetation Land use

Water

Distance to permanent water source metresDistance to temporary water source metres

Name of nearest permanent water source

Name of nearest temporary water

Site Description

The extensive artefact scatter was located on the western bank of Wollombi Brook in a bleached white sand body. The artefact scatter was on the upper terrace of Wollombi Brook which is a high order stream with extensive braided channels. There were numerous artefacts on the surface of the sand body with a number of the artefacts partially covered by sand. An uprooted tree had a number of artefacts in the root ball of the tree showing that there were subsurface artefacts in that area. Flat-lying, jointed, flaggy sandstone was exposed to the south east and north west of the sand deposit. The sandstone appeared to be continuous subsurface and dipped to the south east. There were three sandstone grinding bowls/surfaces in the eastern part of the sandstone sheet (Wambo Sites 330, 331 and 332). There were grinding grooves in the creek bed at the confluence of North Wambo Creek and Wollombi Brook. The artefact deposit extended to the south east along the length of the sandstone sheet with a thin layer of wind-blown sands covering some of the artefacts. Cattle had been grazing in the paddock and had disturbed the surface of the soil in this area. The jointed sandstone trapped water forming small water holes in this part of the creek bank. The majority of the artefact scatter in the south east was within the 40 metre riparian zone although the north western extent of the artefact scatter was approximately 90 metres from the creek bank. The artefact scatter extended along an upper terrace for more than 350 metres and is approximately 90 metres in width. Artefact raw materials included red and yellow mudstone, red and grey silcrete, basalt, chert, grey and blue-green quartzite, quartz and petrified wood. Artefact types included cores, flakes, backed artefacts, blades, core scrapers and Bondi points. Disturbances included fencing works, cattle grazing, contour banks, modified drainage channels and erosion. There was some rubbish dumped in the area. Vegetation was Eucalypt woodland with pasture grasses.

Photos



Plate 1: View to the south east showing bleached sand body.



Plate 2: Bolus of uprooted tree showing artefacts embedded in soil.



Plate 3: Red mudstone flake partially covered by bleached sand.



Plate 4: Blue green quartzite cobble on surface of sand body.



Plate 5: Artefact at edge of treed area to west of sand body.



Plate 6: Artefacts in disturbed sands; quartzite, mudstone and quartz.



Plate 7: Artefacts in south eastern part of artefact scatter on surface of flat-lying sandstone.



Plate 8: Jointed sandstone with trapped water in the south eastern part of the site.



Plate 9: Mudstone flakes in soils disturbed by water runoff.



Plate 10: Retouched artefact on sandstone sheet covered by sandy soil.

WARNING: This plan should be used for archival design purposes only. Coordinates of critical positions should be taken from the RPS Records.



Legend

- S87-90 Application Area
- Sandstone Outcrops
- Earthmound Extent
- Bleached Sands
- RPS Recorded Sites
- Earth mound/Artefacts
- Grinding Groove
- Artefact Scatter
- Scattered Tree
- Fence Line
- 10m Contour

0 200 metres

Scale: 1:2,000



Aboriginal Site Recording Form



AHIMS Registrar

PO Box 1967, Hurstville NSW 2220

Office Use Only

Site Number 3 7 1 5 0 6 4 7

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W A M B O S I T E 3 7 1

Easting 3 1 1 4 8 2 Northing 6 3 9 1 6 2 0 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M S G O O D E G I L L I A N

Organisation R P S

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 06/06/2014

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

Open Site

A 10x10 grid map. The cardinal directions are labeled: N (North) at the top center, S (South) at the bottom center, E (East) on the right side, and W (West) on the left side. The corners are labeled: NW (Northwest), NE (Northeast), SW (Southwest), and SE (Southeast). A compass rose is located in the bottom right corner, showing the cardinal directions N, S, E, and W.

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
☐ Wind erosion
☐ Water erosion
☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Condition of Ceiling

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Shelter Aspect

- ☐ North
☐ North East
☐ East
☐ South East
☐ South
☐ South West
☐ West
☐ North West

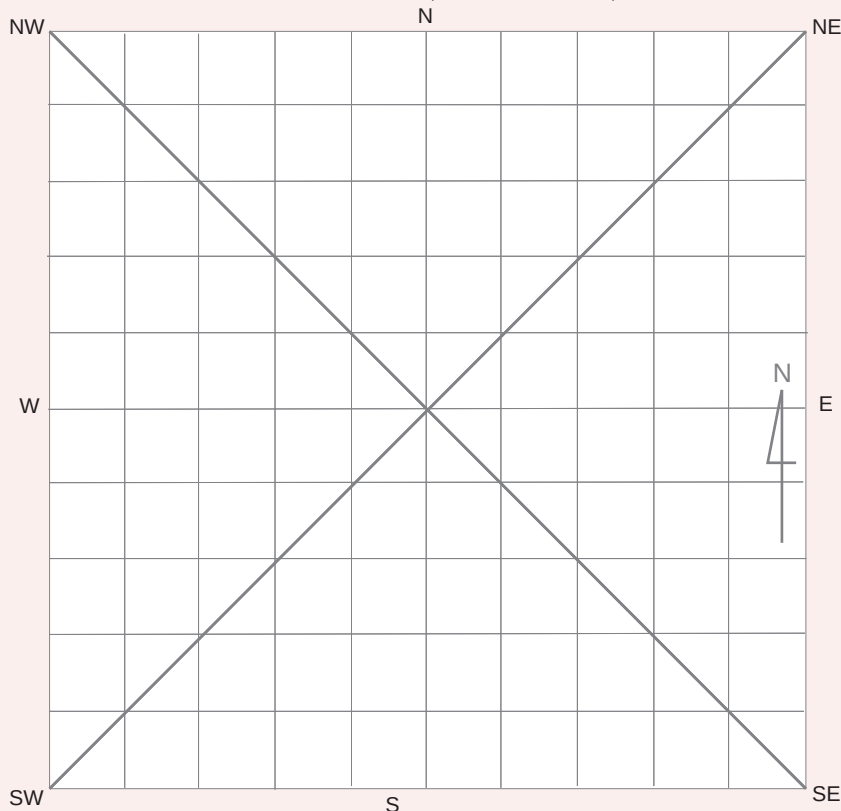
Open Site

Site Orientation

- ☐ N-S
☐ NE-SW
☐ E-W
☐ SE-NW
☒ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
☐ 2. Aboriginal Resource & Gathering
☐ 3. Art
☒ 4. Artefact
☐ 5. Burial
☐ 6. Ceremonial Ring
☐ 7. Conflict
☐ 8. Earth Mound
☐ 9. Fish Trap
☐ 10. Grinding Groove
☐ 11. Habitation Structure
☐ 12. Hearth
☐ 13. Non Human Bone & Organic Material
☐ 14. Ochre quarry
☐ 15. Potential Archaeological Deposit
☐ 16. Stone Quarry
☐ 17. Shell
☐ 18. Stone Arrangement
☐ 19. Modified Tree
☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
 Internal width
 Shelter height
 Shelter floor area

Open Site Dimensions (m)

- Total length of visible site
 Average width of visible site
 Estimated area of visible site
 Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

Endorsed by: ☐ Knowledge Holder ☐ Nominated Trustee ☐ Native Title Holder ☐ Community Consensus

Initials

[illegible][illegible][illegible]

☒ A4 location map

☐ B/W photographs

☒ Colour photographs

☐ Slides

☐ Aerial photographs

☐ Site plans, drawings

☐ Recording tables

☐ Other

☐ Feature inserts-No.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There is a vertical margin line on the left side, creating a narrow left margin. The paper appears to be from a notebook or a standard ruled document.

NPWS FEATURE RECORDING FORM - ARTEFACT

page 1

Site I.D.

Site Name

WAMBO SITE 371

First recorded date

6 June 2014

Importance

Cannot be presently determined

No. of instances

1

Recorded by

GG

Yes No

Stone artefacts only

Yes

Artefacts collected

No

Permit issued

Yes

Percentage of Non-stone Artefacts to Percentage of Stone Artefacts

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% 90-100%

0-9%

Feature Context & Condition

Scatter No.

1

Easting

3 1 1 4 8 2

Northing

6 3 9 1 6 2 0

Density

Dimensions

Yes No

(Artefact count per square metre)

1

1

Length (m)

1

Width (m)

0

Depth (m)

In situ

No

Stratified

No

Feature Condition

General Condition

Recommended Action

☐

Very good

☒

Weathered

☐

Boardwalk

☐

Revegetation

☒

Good

☐

Vehicle damage

☐

Fencing

☐

Signage

☐

Poor

☐

Surface water wash

☐

Closure to public

☐

Soil erosion control

☐

Fire damage

☒

Continued inspection

☐

Track closure/re-routing

☐

Erosion

☐

Fire hazard reduction

☐

Additional recording

☒

Stock damage

☐

Expert assessment

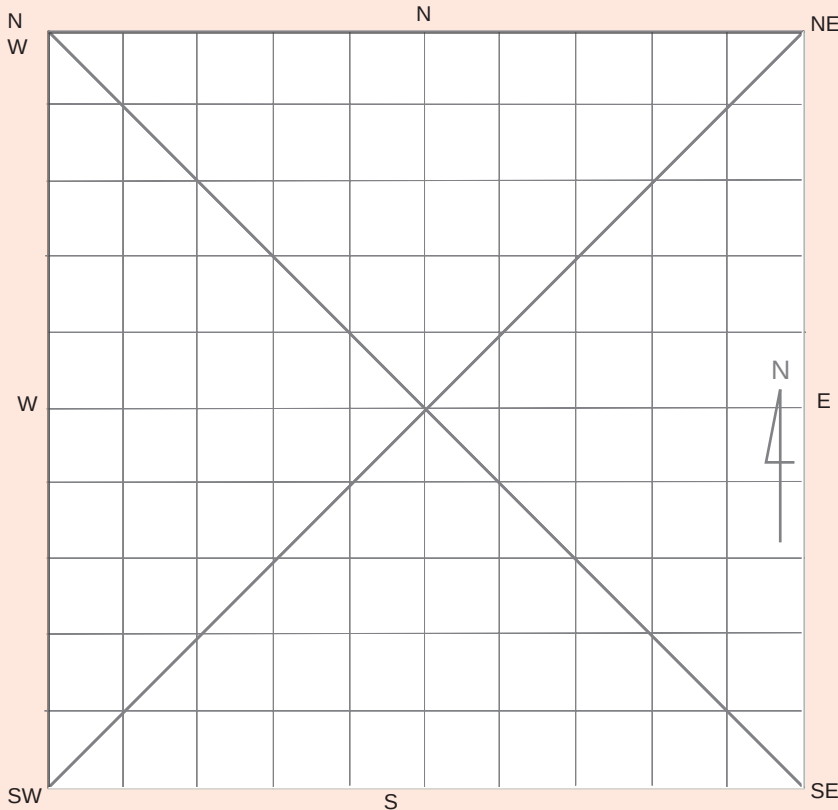
☒

Exposed archaeological material

☐

Meeting with land manager

Feature Plan (Indicate scale, location of instances)



Feature Environment

(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

Plain

Land form

Lower Slope

Land form unit

Gently Sloping

Slope

Grassland

Vegetation

Grazing

Land use

Water

Distance to permanent water source

375

metres

Distance to temporary water source

200

metres

Name of nearest permanent water source

Wollombi Brook

Name of nearest temporary water

South Wambo Creek

Table: Artefact Attributes

[illegible]

Photos



Wambo Site 371 Muller



Wambo Site 371 Grinding surface



Wambo Site 371 View of gently sloping land surface to west of Wollombi Brook



Aboriginal Site Recording Form



AHIMS Registrar
PO Box 1967, Hurstville NSW 2220

Office Use Only

Site Number 3 7 - 5 - 0 6 4 8

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W A M B O S I T E 3 7 2

Easting 3 1 1 5 2 2 Northing 6 3 9 1 6 2 2 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M S G O O D E G I L L I A N

Organisation R P S

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 06/06/2014

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

Open Site

A 10x10 grid map with cardinal directions (N, S, E, W) and a compass rose in the bottom right corner.

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
☐ Wind erosion
☐ Water erosion
☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Condition of Ceiling

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Shelter Aspect

- ☐ North
☐ North East
☐ East
☐ South East
☐ South
☐ South West
☐ West
☐ North West

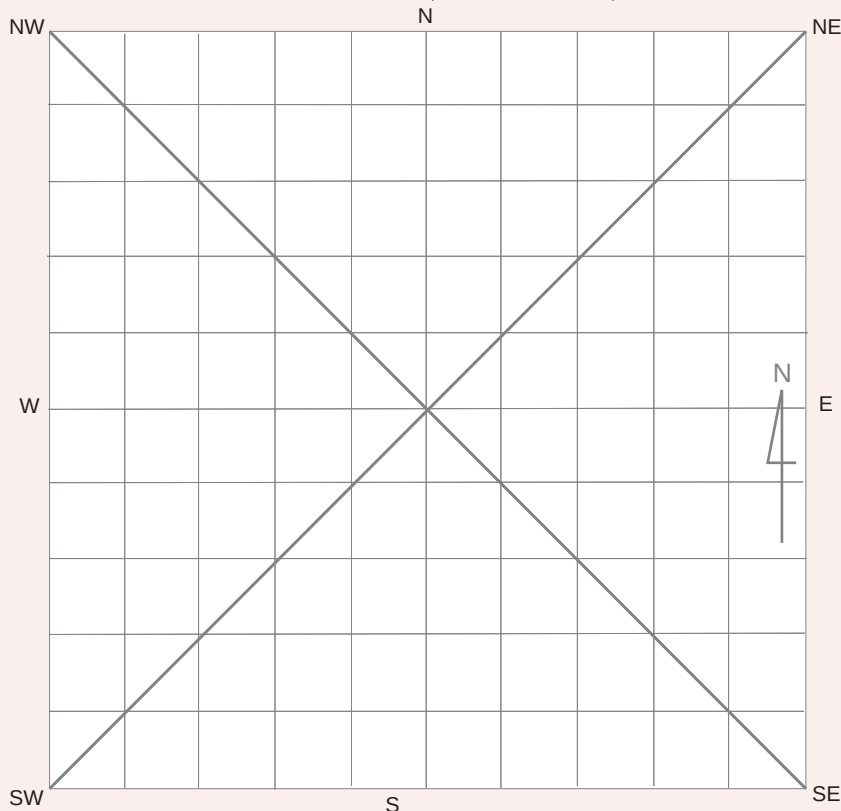
Open Site

Site Orientation

- ☐ N-S
☐ NE-SW
☐ E-W
☐ SE-NW
☒ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
☐ 2. Aboriginal Resource & Gathering
☐ 3. Art
☒ 4. Artefact
☐ 5. Burial
☐ 6. Ceremonial Ring
☐ 7. Conflict
☐ 8. Earth Mound
☐ 9. Fish Trap
☐ 10. Grinding Groove
☐ 11. Habitation Structure
☐ 12. Hearth
☐ 13. Non Human Bone & Organic Material
☐ 14. Ochre quarry
☐ 15. Potential Archaeological Deposit
☐ 16. Stone Quarry
☐ 17. Shell
☐ 18. Stone Arrangement
☐ 19. Modified Tree
☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
 Internal width
 Shelter height
 Shelter floor area

Open Site Dimensions (m)

- Total length of visible site
 Average width of visible site
 Estimated area of visible site
 Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

[illegible]

☒ A4 location map
☐ B/W photographs
☒ Colour photographs
☐ Slides
☐ Aerial photographs
☐ Site plans, drawings
☐ Recording tables
☐ Other
☐ Feature inserts-No.

[illegible]

Site I.D.		Site Name	WAMBO SITE 372	
First recorded date	6 June 2014	Importance	Cannot be presently determined	
No. of instances	1			
Recorded by	GG			
	Yes No			
Stone artefacts only	Yes	Percentage of Non-stone Artefacts to Percentage of Stone Artefacts		
Artefacts collected	No	0-9%	10-19%	20-29%
Permit issued	Yes	0-9%	30-39%	40-49%
			50-59%	60-69%
			70-79%	80-89%
			90-100%	

Feature Context & ConditionScatter No. Easting Northing **Density****Dimensions**

Yes No

(Artefact count per square metre)

Length (m)

Width (m)

Depth (m)

In situ

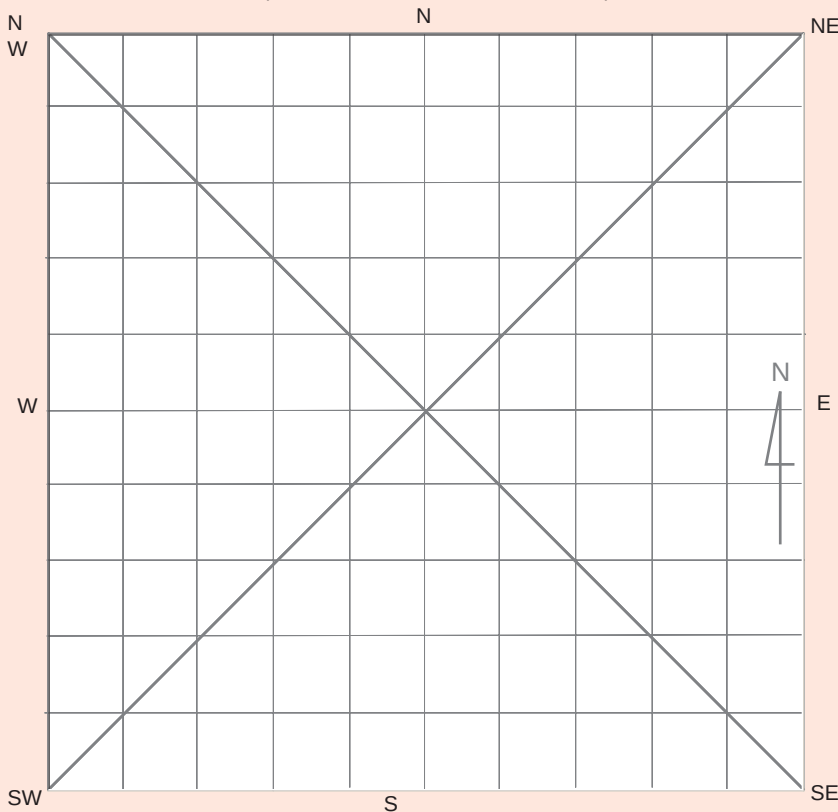
Stratified

Feature Condition**General Condition****Recommended Action**

- ☐ Very good
- ☒ Good
- ☐ Poor

- ☒ Weathered
- ☐ Vehicle damage
- ☐ Surface water wash
- ☐ Fire damage
- ☐ Erosion
- ☒ Stock damage
- ☒ Exposed archaeological material

- ☐ Boardwalk
- ☐ Fencing
- ☐ Closure to public
- ☒ Continued inspection
- ☐ Fire hazard reduction
- ☐ Expert assessment
- ☐ Meeting with land manager
- ☐ Revegetation
- ☐ Signage
- ☐ Soil erosion control
- ☐ Track closure/re-routing
- ☐ Additional recording

Feature Plan (Indicate scale, location of instances)**Feature Environment**(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

Land form

Land form unit

Slope

Vegetation

Land use

WaterDistance to permanent water source metresDistance to temporary water source metres

Name of nearest permanent water source

Name of nearest temporary water

Table: Artefact Attributes

[illegible]

Photos



Wambo Site 372 Large Mudstone Core



Site 372 View of gently sloping land surface to west of Wollombi Brook



Aboriginal Site Recording Form



AHIMS Registrar
PO Box 1967, Hurstville NSW 2220

Office Use Only

Site Number 3 7 - 5 - 0 6 4 9

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W A M B O S I T E 3 7 3

Easting 3 1 1 6 5 7 Northing 6 3 9 1 5 4 7 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M S G O O D E G I L L I A N

Organisation R P S

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 06/06/2014

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

Open Site

Landform

Slope
 degrees

- ☐ Beach
- ☐ Coastal rock platform
- ☐ Dune
- ☐ Intertidal flat
- ☐ Lagoon
- ☐ Tidal Creek

☐	Tidal Flat	☐	Upper slope	☐	Stream bank
☐	Cliff	☐	Plain	☐	Stream channel
☐	Crest	☐	Ridge	☐	Swamp
☐	Flat	☐	Tor	☐	Terrace
☒	Lower slope	☐	Valley flat	☐	Terrace flat
☐	Mid slope	☐	Levy		

☐ Closed forest

☒ Grasslands

☐ Isolated clumps of trees

☐ Open forest

☐ Open woodland

☐ Scrub

☐ Woodland

☐ Cleared

☐ Revegetated

☐ N/A

- ☐ Conservation
- ☐ Established urban
- ☐ Farming-intensive
- ☒ Farming-low intensity
- ☐ Forestry
- ☐ Industrial
- ☐ Mining
- ☐ Pastoral/grazing
- ☐ Recreation
- ☐ Semi-rural
- ☐ Service corridor
- ☐ Transport corridor
- ☐ Urban expansion
- ☐ Residential

Distance to permanent water source	200	metres
Distance to temporary water source	125	metres
Name of nearest permanent water source	Wollombi Brook	
Name of nearest temporary water	trib South Wambo Ck	

Refer to DGPS co-ordinates

☐ Public National Park / other Government
Dept.

✓	Private	WAMBO COAL MINE

I.D. (I.D. Office Use only)

[illegible]

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
☐ Wind erosion
☐ Water erosion
☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Condition of Ceiling

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Shelter Aspect

- ☐ North
☐ North East
☐ East
☐ South East
☐ South
☐ South West
☐ West
☐ North West

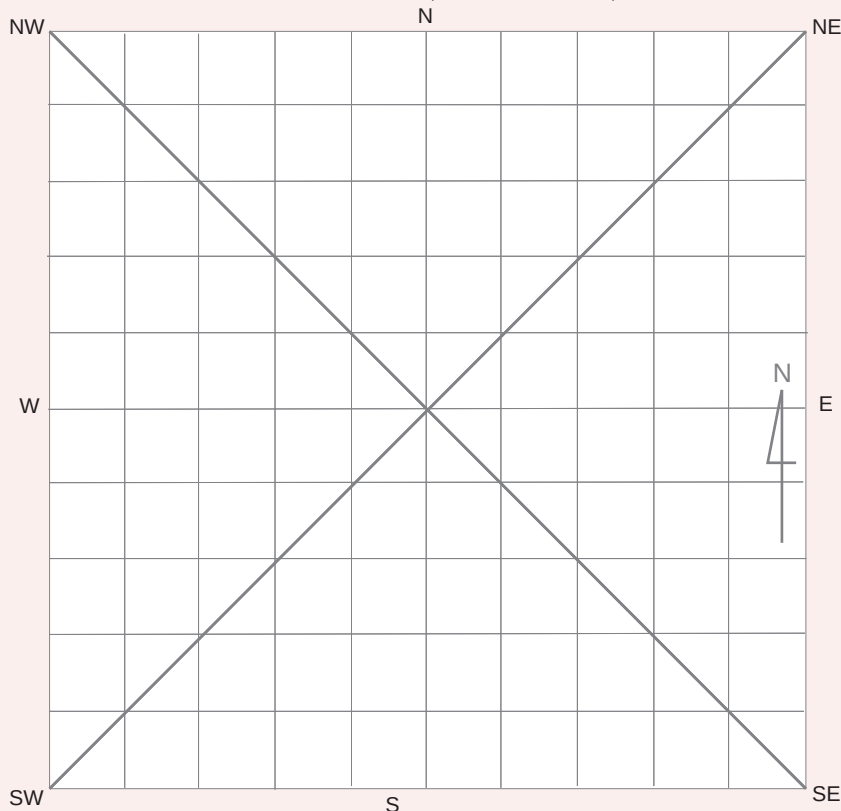
Open Site

Site Orientation

- ☐ N-S
☐ NE-SW
☐ E-W
☐ SE-NW
☒ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
☐ 2. Aboriginal Resource & Gathering
☐ 3. Art
☒ 4. Artefact
☐ 5. Burial
☐ 6. Ceremonial Ring
☐ 7. Conflict
☐ 8. Earth Mound
☐ 9. Fish Trap
☐ 10. Grinding Groove
☐ 11. Habitation Structure
☐ 12. Hearth
☐ 13. Non Human Bone & Organic Material
☐ 14. Ochre quarry
☐ 15. Potential Archaeological Deposit
☐ 16. Stone Quarry
☐ 17. Shell
☐ 18. Stone Arrangement
☐ 19. Modified Tree
☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
 Internal width
 Shelter height
 Shelter floor area

Open Site Dimensions (m)

- Total length of visible site
 Average width of visible site
 Estimated area of visible site
 Length of assessed site area

This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is a margin at the top, and the entire sheet is framed by a thin black border.

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

[illegible]

☒ A4 location map
☐ B/W photographs
☒ Colour photographs
☐ Slides
☐ Aerial photographs
☐ Site plans, drawings
☐ Recording tables
☐ Other
☐ Feature inserts-No.

[illegible]

NPWS FEATURE RECORDING FORM - ARTEFACT

page 1

Site I.D. Site Name First recorded date Importance No. of instances Recorded by

Yes No

Stone artefacts only Artefacts collected Permit issued

Percentage of Non-stone Artefacts to Percentage of Stone Artefacts

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% 90-100%

Feature Context & Condition

Scatter No. Easting Northing

Density

Dimensions

Yes No

(Artefact count per square metre)

Length (m)

Width (m)

Depth (m)

In situ

Stratified

Feature Condition

General Condition

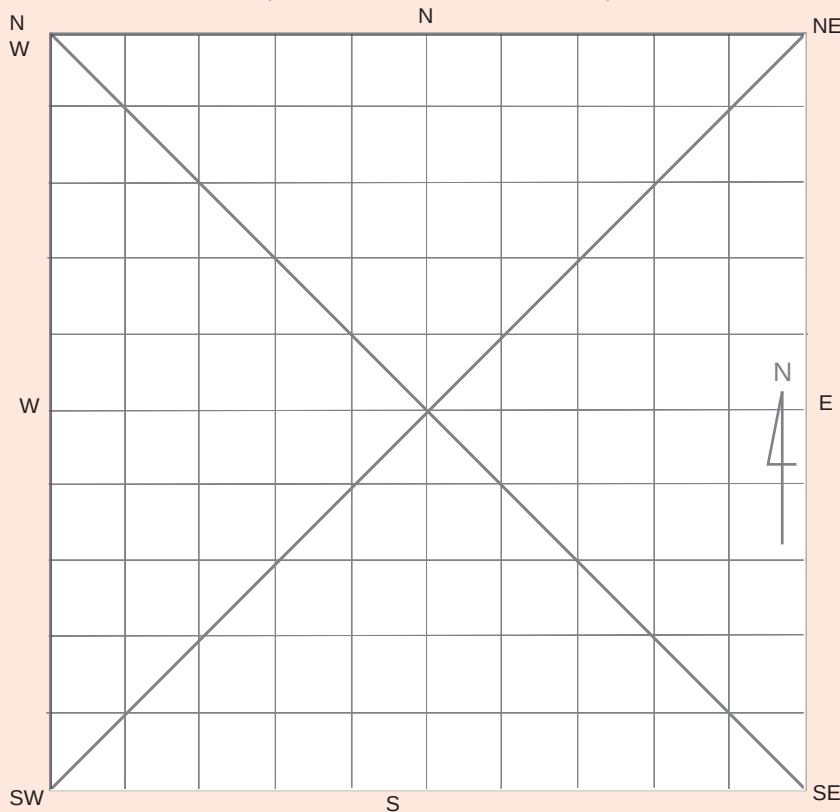
Recommended Action

- ☐ Very good
- ☒ Good
- ☐ Poor

- ☒ Weathered
- ☐ Vehicle damage
- ☐ Surface water wash
- ☐ Fire damage
- ☐ Erosion
- ☒ Stock damage
- ☒ Exposed archaeological material

- ☐ Boardwalk
- ☐ Fencing
- ☐ Closure to public
- ☒ Continued inspection
- ☐ Fire hazard reduction
- ☐ Expert assessment
- ☐ Meeting with land manager
- ☐ Revegetation
- ☐ Signage
- ☐ Soil erosion control
- ☐ Track closure/re-routing
- ☐ Additional recording

Feature Plan (Indicate scale, location of instances)



Feature Environment

(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)Plain Land formLower Slope Land form unitGently Sloping SlopeGrassland VegetationGrazing Land use

Water

Distance to permanent water source metresDistance to temporary water source metres

Name of nearest permanent water source

Name of nearest temporary water

Table: Artefact Attributes

[illegible]

Photos



Wambo site 373 Yellow Silcrete Flake



Wambo Site 373 View of gently sloping land surface to west of Wollombi Brook



Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville NSW 2220



Office Use Only

Site Number 3 7 - 5 - 0 6 5 0

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W A M B O S I T E 3 7 4

Easting 3 1 1 6 1 9 Northing 6 3 9 1 7 6 1 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M S G O O D E G I L L I A N

Organisation R P S

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 06/06/2014

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

Open Site

Landform

Slope
 degrees

Landform Unit

- ☐ Beach
- ☐ Coastal rock platform
- ☐ Dune
- ☐ Intertidal flat
- ☐ Lagoon
- ☐ Tidal Creek

☐ Tidal Flat
☐ Cliff
☐ Crest
☐ Flat
☒ Lower slope
☐ Mid slope

- ☐ Upper slope
- ☐ Plain
- ☐ Ridge
- ☐ Tor
- ☐ Valley flat
- ☐ Levy

- ☐ Stream bank
- ☐ Stream channel
- ☐ Swamp
- ☐ Terrace
- ☐ Terrace flat

Land use

- ☐ Closed forest
- ☐ Grasslands
- ☐ Isolated clumps of trees
- ☐ Open forest
- ☐ Open woodland
- ☐ Scrub
- ☐ Woodland
- ☒ Cleared
- ☐ Revegetated
- ☐ N/A

- ☐ Conservation
- ☐ Established urban
- ☐ Farming-intensive
- ☒ Farming-low intensity
- ☐ Forestry
- ☐ Industrial
- ☐ Mining
- ☐ Pastoral/grazing
- ☐ Recreation
- ☐ Semi-rural
- ☐ Service corridor
- ☐ Transport corridor
- ☐ Urban expansion
- ☐ Residential

Water

Distance to permanent water source 250 metres

Distance to temporary water source	330	metres

Name of nearest permanent water source Wollombi Brook

Name of nearest temporary water	South Wambo Ck Trib

Directions for Relocation

Refer to DGPS co-ordinates

Current Land Tenure

☐ Public National Park / other Government Dept.

✓	Private	WAMBO COAL MINE

Primary report

I.D. (I.D. Office Use only)

[illegible]

Site Location Map

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
- ☐ Wind erosion
- ☐ Water erosion
- ☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Condition of Ceiling

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Shelter Aspect

- ☐ North
- ☐ North East
- ☐ East
- ☐ South East
- ☐ South
- ☐ South West
- ☐ West
- ☐ North West

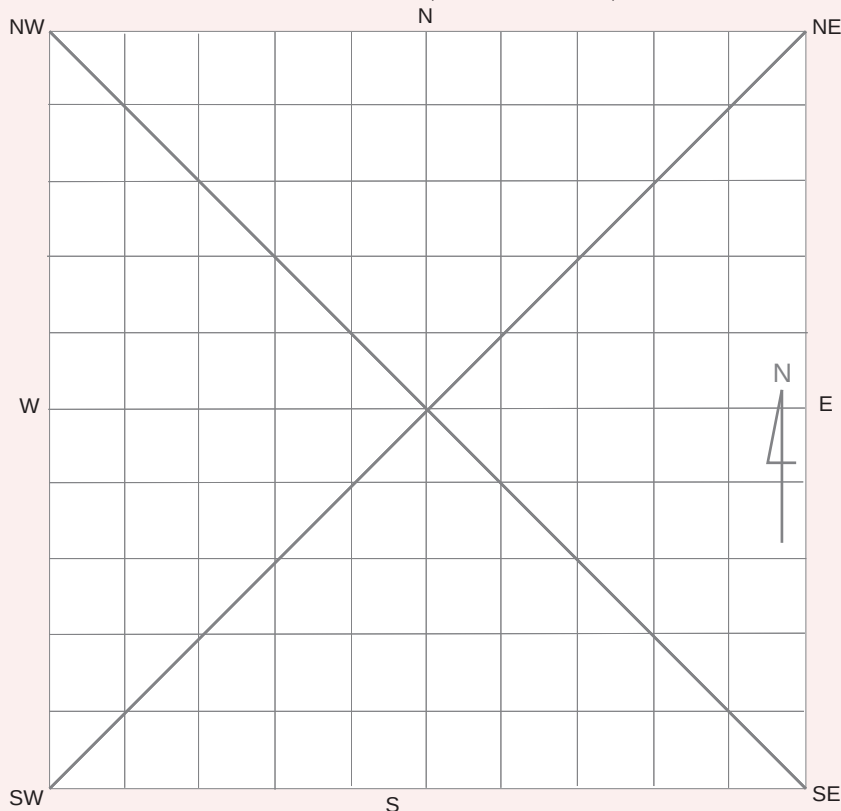
Open Site

Site Orientation

- ☐ N-S
- ☐ NE-SW
- ☐ E-W
- ☐ SE-NW
- ☒ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
- ☐ 2. Aboriginal Resource & Gathering
- ☐ 3. Art
- ☒ 4. Artefact
- ☐ 5. Burial
- ☐ 6. Ceremonial Ring
- ☐ 7. Conflict
- ☐ 8. Earth Mound
- ☐ 9. Fish Trap
- ☐ 10. Grinding Groove
- ☐ 11. Habitation Structure
- ☐ 12. Hearth
- ☐ 13. Non Human Bone & Organic Material
- ☐ 14. Ochre quarry
- ☐ 15. Potential Archaeological Deposit
- ☐ 16. Stone Quarry
- ☐ 17. Shell
- ☐ 18. Stone Arrangement
- ☐ 19. Modified Tree
- ☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
- Internal width
- Shelter height
- Shelter floor area

Open Site Dimensions (m)

- 1 Total length of visible site
- 1 Average width of visible site
- 1sqm Estimated area of visible site
- 5 Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

[illegible]

☒ A4 location map
☐ B/W photographs
☒ Colour photographs
☐ Slides
☐ Aerial photographs
☐ Site plans, drawings
☐ Recording tables
☐ Other
☐ Feature inserts-No.

This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is a margin at the top, and the paper appears to be part of a notebook or binder, as evidenced by the binding edge on the left.

NPWS FEATURE RECORDING FORM - ARTEFACT

page 1

Site I.D.

Site Name

WAMBO SITE 374

First recorded date

6 June 2014

Importance

Cannot be presently determined

No. of instances

1

Recorded by

GG

Yes No

Stone artefacts only

Yes

Artefacts collected

No

Permit issued

Yes

Percentage of Non-stone Artefacts to Percentage of Stone Artefacts

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% 90-100%

0-9%

Feature Context & Condition

Scatter No.

1

Easting

3 1 1 6 1 9

Northing

6 3 9 1 7 6 1

Density

Dimensions

Yes No

(Artefact count per square metre)

1

1

Length (m)

1

Width (m)

0

Depth (m)

In situ

No

Stratified

No

Feature Condition

General Condition

Recommended Action

☐

Very good

☒

Weathered

☐

Boardwalk

☐

Revegetation

☐

Good

☐

Vehicle damage

☐

Fencing

☐

Signage

☒

Poor

☒

Surface water wash

☐

Closure to public

☐

Soil erosion control

☐

Fire damage

☒

Continued inspection

☐

Track closure/re-routing

☒

Erosion

☐

Fire hazard reduction

☐

Additional recording

☒

Stock damage

☐

Expert assessment

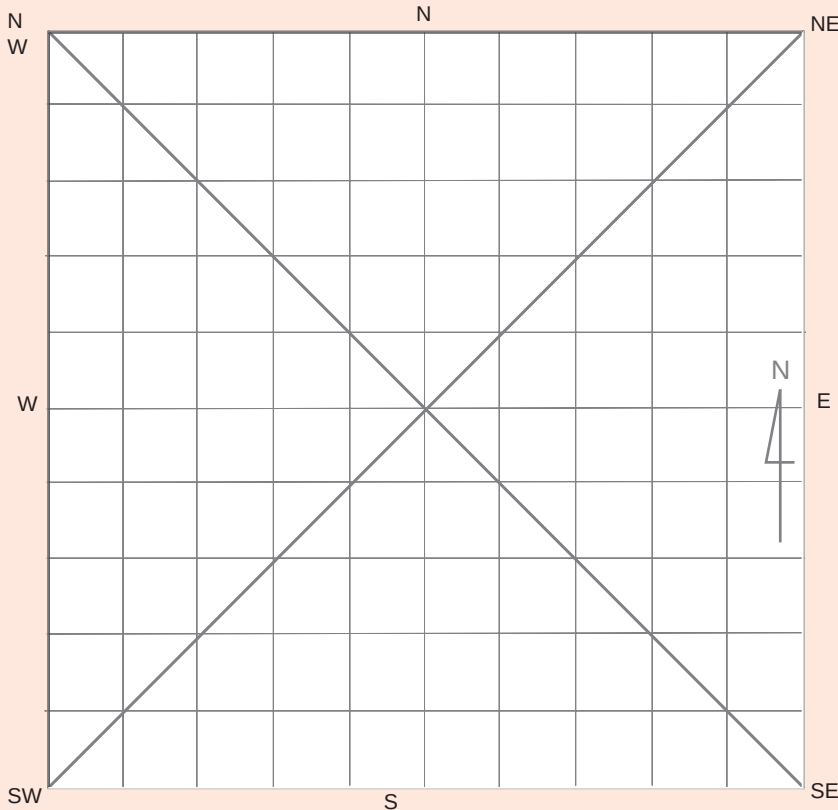
☒

Exposed archaeological material

☐

Meeting with land manager

Feature Plan (Indicate scale, location of instances)



Feature Environment

(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

Plain

Land form

Mid Slope

Land form unit

Gently Sloping

Slope

Grassland

Vegetation

Grazing

Land use

Water

Distance to permanent water source

250

metres

Distance to temporary water source

330

metres

Name of nearest permanent water source

Wollombi Brook

Name of nearest temporary water

South Wambo Creek tributary

Table: Artefact Attributes

[illegible]

Photos



Wambo Site 374 Isolated heated mudstone flake scraper



Wambo Site 374 Gentle west facing elevated landform

[X] New recording

[] Additional Info



National Parks and Wildlife Service

Box 1967, Hurstville NSW 2220. Tel: (02) 585 6444.

Standard Site Recording Form Revised 5/88



37-5-0188

1:250,000 map sheet: SINGLETON.

NPWS Code

13.7

AMG Grid reference

Full reference - please include leading digits

250K
311720 mE
 25K
 5/8
 250K
6391680 mN
 25K

Scale of map used for grid reference
Please use largest scale available
☒ 25K, 50K (preferred)
 ☐ 100K
 ☐ 250K
1:25K, 50K, 100K map name: Doyles Ck.

HEAD OFFICE USE ONLY:

NPWS Site no: 37-5-188Site types: 12 Scarred TreeAccessioned by: Stephen Falk Date: 17-4-91Data entered by: Stephen Falk Date: 23-4-91Owner/Manager: WAMBO MINING CORP.Address: WARRWORTH N.S.W.
WARRWORTH N.S.W.Site name: NN 18Locality/property name: NTM WAMBO CREEK

NPWS District:

Region: CENTRAL

Reason for investigation

ARCHAEOLOGICAL SURVEY FOR PROPOSED MINING.

Portion no:

Parish: LEAMINGTON 9 Whybrow

Photos taken?

How many attached?

How to get to the site (refer to permanent features, give best approach to site eg. from above, below, along cliff.
(Draw diagram on separate sheet.)

From the confluence of North Wambo Ck + Wollambi Brook drive south for 250m. The site is located about 10m west of the track.

Other sites in locality? YES.Site Types include: OPEN POSSIBLE SCARRED TREEAre sites in NPWS Register? YES.

Have artefacts been removed from site?

When?

By whom?

Deposited where?

Is site important to local Aborigines?

Give contact(s) name(s) + address(es)

PHILLIP MAHE & JOHN MATTHEWS
WANARUAH LOCAL ABORIGINAL LAND COUNCIL.

Contacted for this recording?

(Attach additional information separately) If not, why not?

Verbal/written reference sources (including full title of accompanying report)

RICH E. 1991. PROPOSED OPEN CUT AND UNDERGROUND MINING AT WAMBO NEAR WARRWORTH IN THE HUNTER VALLEY N.S.W.
ARCHAEOLOGICAL SURVEY FOR ABORIGINAL SITES.

NPWS Report
Catalogue #C-1971

Checklist:

surface visibility,
 damage/disturbance/
 threat to site

Condition of site: THE TREE IS QUITE HEALTHY, THOUGH IT HAS A NUMBER OF DEAD BRANCHES. THERE IS SOME EVIDENCE OF WOOD ROT ON THE SECOND, BIGGEST SCAR, BUT OTHERWISE THE SCARS ARE IN GOOD CONDITION.

Recommendations for management & protection (attach separate sheet if necessary):

THIS SITE WOULD NOT BE EFFECTED BY THE PROPOSED DEVELOPMENT.

Site recorded by:

E. RICHDate: 29/8/90

Address/institution: 12 ANGEL RD,
STRATHFIELD.

NM Site 18

POSSIBLE SCARRED TREE

Location: Doyle's Creek grid ref. 3/1172 63/9168

The scarred tree is located on high ground on the west side of Wollombi Brook. It is 150m west of the Brook and about 300m south of North Wambo Creek.

Description: This scarred ironbark tree is a possible Aboriginal site, having two scars which both have horizontal axe marks across the face of the scars. The tree is about 15m tall with a circumference around the trunk of 3.08m.

1. This scar is 72cm long and 23cm wide. The regrowth around the scar is 13cm thick and 12-24cm wide. Two axe marks are across the centre of the scar, having been cut into the wood after the bark was removed. The axe marks are 93-97cm above the ground. The bottom of the scar is 63cm above the ground.

2. This scar is 1.49 long and 68cm wide. The regrowth around the scar is 12cm thick and 38cm wide. Two axe marks are across the upper third of the scar, having been cut into the wood after the bark was removed. The axe marks are 90cm above the ground. The bottom of the scar is 6cm above the ground.



Photo 32:
Scarred tree
showing scar
no. 1.

Physical Condition: The tree is quite healthy though it has a number of dead branches. There is some evidence of wood rot on the second, biggest scar, but otherwise the scars are in good condition.

Relation to Proposed Development: The site would not be affected by the proposed development.



Photo 32:

detail of
scar no. 1



Photo 33: detail of scar no. 2.



Aboriginal Site Recording Form



AHIMS Registrar
PO Box 1967, Hurstville NSW 2220

Office Use Only

Site Number 3 | 7 | - | 5 | - | 0 | 6 | 3 | 8

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W | A | M | B | O | S | I | T | E | 3 | 3 | 0 |

Easting 3 | 1 | 1 | 8 | 2 | 5 Northing 6 | 3 | 9 | 1 | 5 | 7 | 2 AGD/GDA GDA

Mapsheet D | O | Y | L | E | S C | R | E | E | K |

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M | S G | O | O | D | E G | I | L | L | I | A | N

Organisation R | P | S A | U | S | T | R | A | L | I | A E | A | S | T P | T | Y L | T | D

Address P | O B | O | X 4 | 2 | 8 H | A | M | I | L | T | O | N N | S | W 2 | 3 | 0 | 3

Phone number 2 | 4 | 9 | 4 | 0 | 4 | 2 | 0 | 0 Fax 2 | 4 | 9 | 6 | 1 | 6 | 7 | 9 | 4

Date recorded 10/06/2011

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

SE 1

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
- ☐ Wind erosion
- ☐ Water erosion
- ☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Open Site

Site Orientation

- ☐ N-S
- ☐ NE-SW
- ☒ E-W
- ☐ SE-NW
- ☐ N/A

Condition of Ceiling

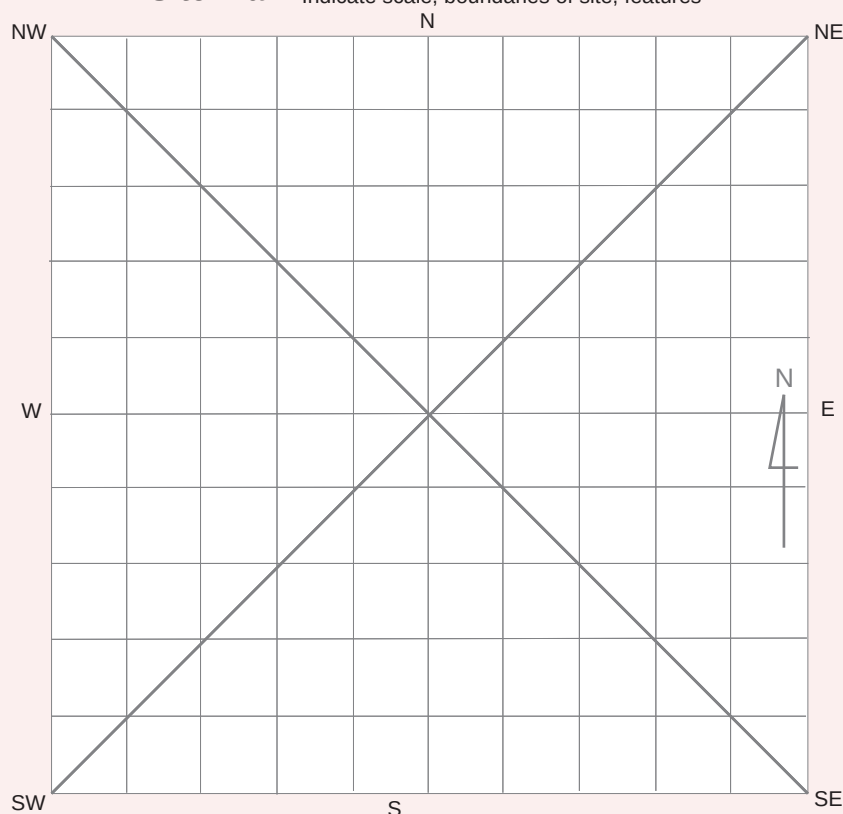
- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Shelter Aspect

- ☐ North
- ☐ North East
- ☐ East
- ☐ South East
- ☐ South
- ☐ South West
- ☐ West
- ☐ North West

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
- ☐ 2. Aboriginal Resource & Gathering
- ☐ 3. Art
- ☐ 4. Artefact
- ☐ 5. Burial
- ☐ 6. Ceremonial Ring
- ☐ 7. Conflict
- ☐ 8. Earth Mound
- ☐ 9. Fish Trap
- ☒ 10. Grinding Groove
- ☐ 11. Habitation Structure
- ☐ 12. Hearth
- ☐ 13. Non Human Bone & Organic Material
- ☐ 14. Ochre quarry
- ☐ 15. Potential Archaeological Deposit
- ☐ 16. Stone Quarry
- ☐ 17. Shell
- ☐ 18. Stone Arrangement
- ☐ 19. Modified Tree
- ☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
- Internal width
- Shelter height
- Shelter floor area

Open Site Dimensions (m)

- 20m Total length of visible site
- 20m Average width of visible site
- 400m Estimated area of visible site
- 100m Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

[illegible][illegible]

Site I.D. Site Name First recorded date Importance

Aboriginal Information Recorded?

No. of instances Recorded by **Feature Description****Type of Grinding Feature**

- ☐ Broad
- ☐ Narrow/point
- ☐ Hollow

☒ Flat

Profile Shape

- ☐ 'U' shaped
- ☐ 'V' shaped
- ☒ Flat

Seed Species PresentRecording date **Groove Function****Dimensions****Smallest**Length (mm) Width (mm) Depth (mm) **Largest**Length (mm) Width (mm) Depth (mm) Groove count Cluster count **Feature Context & Condition**Easting Northing Dimensions of Whole Feature Length (m) Width (m)**Feature Condition**

- ☒ Very good
- ☐ Good
- ☐ Poor

General Condition

- ☒ Weathered
- ☐ Vandalised

General Condition ctd

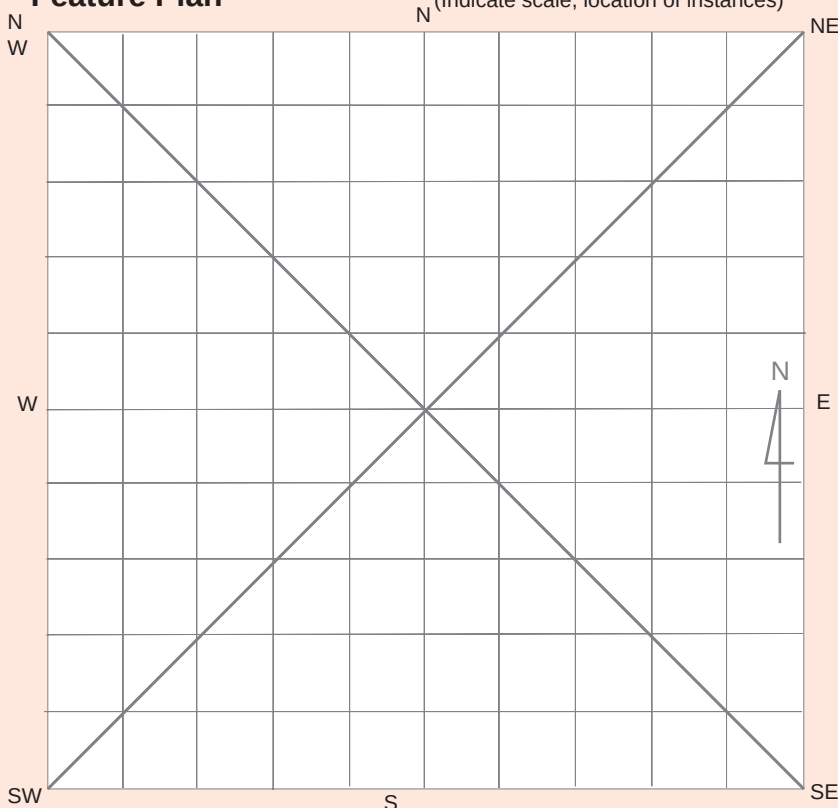
- ☐ Fire damage
- ☒ Surface water wash
- ☐ Graffiti
- ☐ Vehicle damage
- ☐ Erosion
- ☐ Stock damage

Recommended Action

- ☐ Boardwalk
- ☐ Cage/barrier/fencing
- ☐ Closure to public
- ☒ Continued inspection
- ☐ Expert assessment
- ☐ Graffiti removal
- ☐ Meeting with land manager
- ☐ Revegetation
- ☐ Rubbish removal
- ☐ Signage
- ☐ Erosion control
- ☐ Track closure/re-routing
- ☐ Additional recording

Feature Plan

(Indicate scale, location of instances)

**Feature Environment**(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

Land form

Land form unit

Slope

Vegetation

Land use

WaterDistance to permanent water source metresDistance to temporary water source metres

Name of nearest permanent water source

Name of nearest temporary water

Wambo Sites 330, 331 & 332 - Grinding Surfaces possibly for Food Preparation



Photo: View north showing landform in relation to creek line and sheeted sandstone



Photo: View south showing landform in relation to creek line



Photo: Flat lying sheeted sandstone dipping to the south east



Photo: Exposed flat lying sandstone



Photo: Wambo Site 330 Grinding bowl in exposed sandstone



Photo: Wambo Site 331 Grinding bowl in exposed sandstone



Photo: Wambo Site 332 Exposed sandstone to southwest - grinding surface



Aboriginal Site Recording Form



AHIMS Registrar
PO Box 1967, Hurstville NSW 2220

Office Use Only

Site Number 3 7 - 5 - 0 6 3 9

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W A M B O S I T E 3 3 1

Easting 3 1 1 8 2 0 Northing 6 3 9 1 5 6 8 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M S G O O D E G I L L I A N

Organisation R P S A U S T R A L I A E A S T P T Y L T D

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 10/06/2011

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
☐ Wind erosion
☐ Water erosion
☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Condition of Ceiling

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Shelter Aspect

- ☐ North
☐ North East
☐ East
☐ South East
☐ South
☐ South West
☐ West
☐ North West

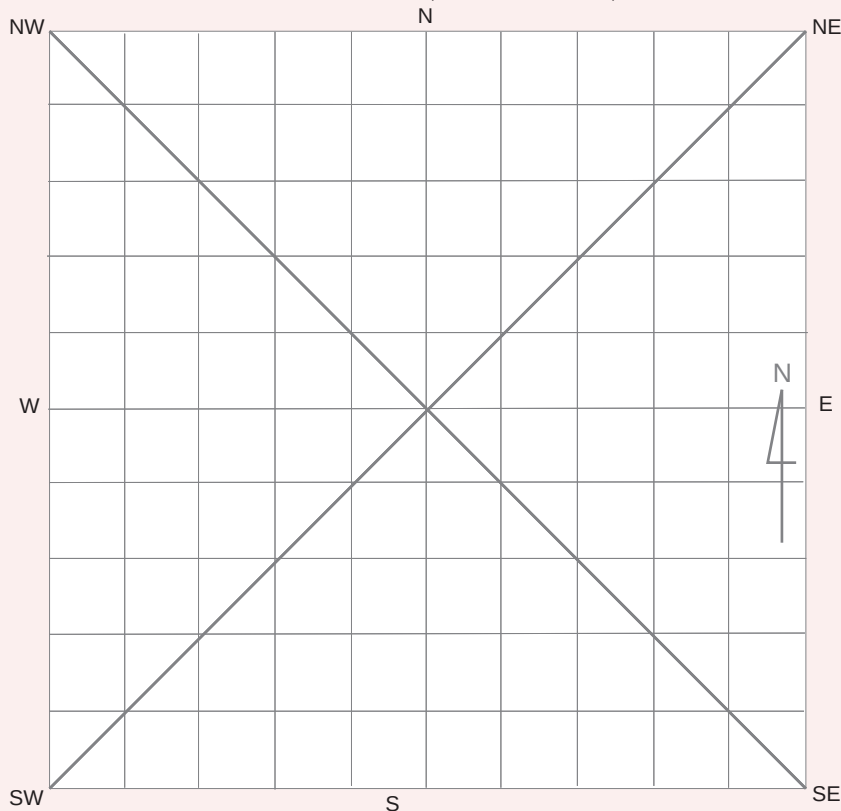
Open Site

Site Orientation

- ☐ N-S
☐ NE-SW
☒ E-W
☐ SE-NW
☐ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
☐ 2. Aboriginal Resource & Gathering
☐ 3. Art
☐ 4. Artefact
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☐ 18. Stone Arrangement
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☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

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Closed Site Dimensions (m)

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 Shelter height
 Shelter floor area

Open Site Dimensions (m)

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 100m Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

[illegible][illegible]

Site I.D. Site Name First recorded date Importance

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- ☐ Poor

General Condition

- ☒ Weathered
- ☐ Vandalised

General Condition ctd

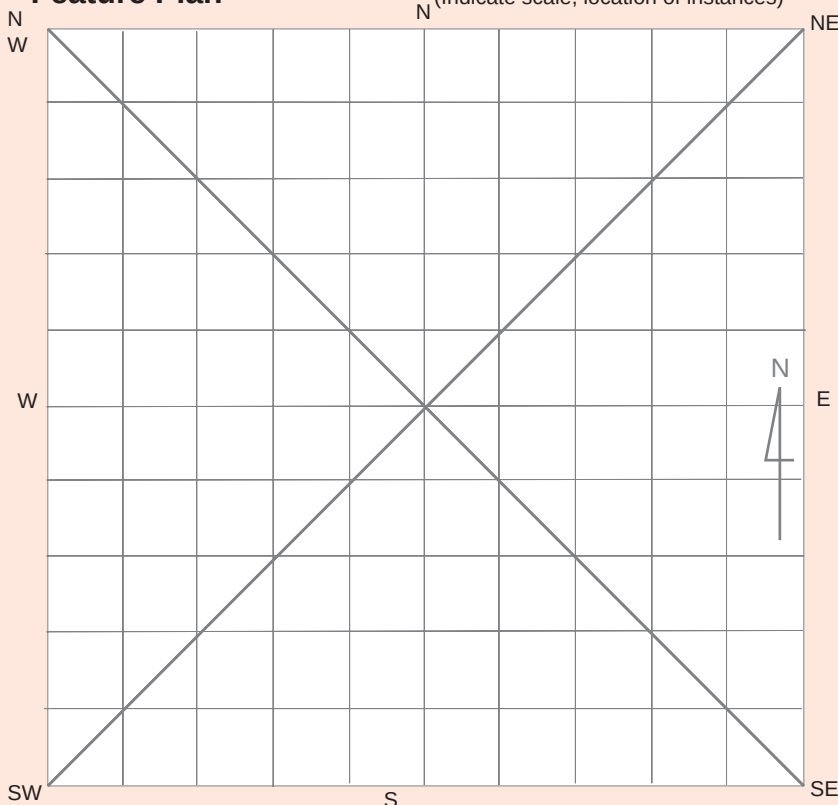
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- ☐ Rubbish removal
- ☐ Signage
- ☐ Erosion control
- ☐ Track closure/re-routing
- ☐ Additional recording

Feature Plan

(Indicate scale, location of instances)

**Feature Environment**(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

Land form

Land form unit

Slope

Vegetation

Land use

WaterDistance to permanent water source metresDistance to temporary water source metres

Name of nearest permanent water source

Name of nearest temporary water

Wambo Sites 330, 331 & 332 - Grinding Surfaces possibly for Food Preparation



Photo: View north showing landform in relation to creek line and sheeted sandstone



Photo: View south showing landform in relation to creek line



Photo: Flat lying sheeted sandstone dipping to the south east



Photo: Exposed flat lying sandstone



Photo: Wambo Site 330 Grinding bowl in exposed sandstone



Photo: Wambo Site 331 Grinding bowl in exposed sandstone



Photo: Wambo Site 332 Exposed sandstone to southwest - grinding surface



Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville NSW 2220



Office Use Only

Site Number 3 7 - 5 - 0 6 4 0

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W A M B O S I T E 3 3 2

Easting 3 1 1 7 5 3 Northing 6 3 9 1 5 3 7 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M S G O O D E G I L L I A N

Organisation R P S A U S T R A L I A E A S T P T Y L T D

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 10/06/2011

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

A 10x10 grid map with cardinal directions (N, S, E, W) and a compass rose in the bottom right corner.

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
- ☐ Wind erosion
- ☐ Water erosion
- ☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
- ☐ Sandstone platform
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Condition of Ceiling

- ☐ Boulder
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- ☐ Weathered
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Shelter Aspect

- ☐ North
- ☐ North East
- ☐ East
- ☐ South East
- ☐ South
- ☐ South West
- ☐ West
- ☐ North West

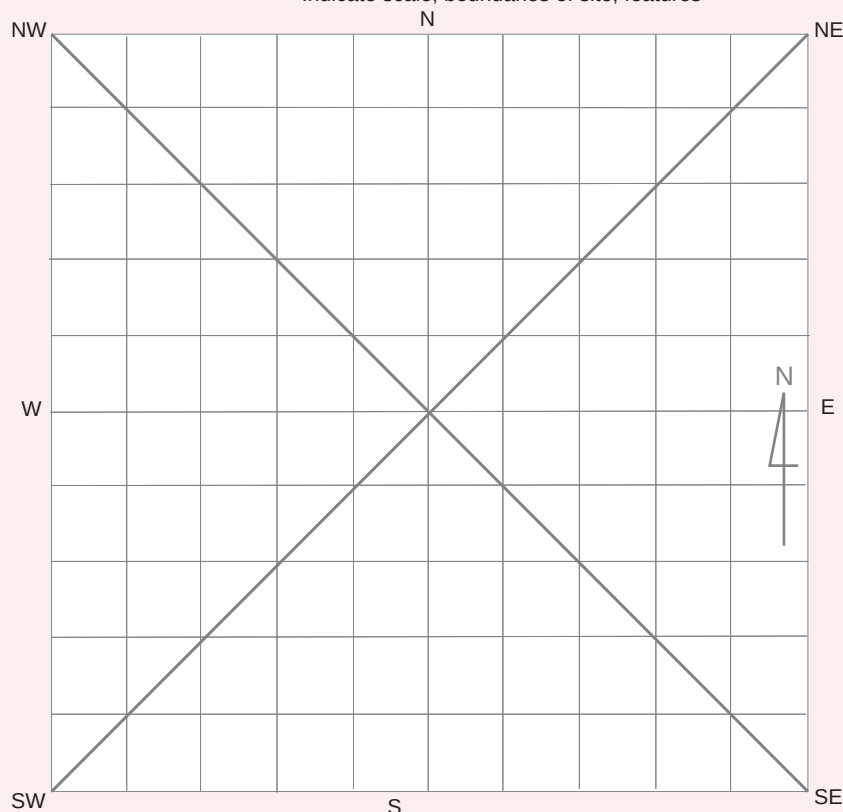
Open Site

Site Orientation

- ☐ N-S
- ☐ NE-SW
- ☒ E-W
- ☐ SE-NW
- ☐ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
- ☐ 2. Aboriginal Resource & Gathering
- ☐ 3. Art
- ☐ 4. Artefact
- ☐ 5. Burial
- ☐ 6. Ceremonial Ring
- ☐ 7. Conflict
- ☐ 8. Earth Mound
- ☐ 9. Fish Trap
- ☒ 10. Grinding Groove
- ☐ 11. Habitation Structure
- ☐ 12. Hearth
- ☐ 13. Non Human Bone & Organic Material
- ☐ 14. Ochre quarry
- ☐ 15. Potential Archaeological Deposit
- ☐ 16. Stone Quarry
- ☐ 17. Shell
- ☐ 18. Stone Arrangement
- ☐ 19. Modified Tree
- ☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
- Internal width
- Shelter height
- Shelter floor area

Open Site Dimensions (m)

- 20m Total length of visible site
- 20m Average width of visible site
- 400 sq m Estimated area of visible site
- 100m Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

Endorsed by: ☐ Knowledge Holder ☐ Nominated Trustee ☐ Native Title Holder ☐ Community Consensus

Initials

[illegible][illegible]

[illegible][illegible][illegible][illegible]

Comments

- ☐ A4 location map
- ☐ B/W photographs
- ☒ Colour photographs
- ☐ Slides
- ☐ Aerial photographs
- ☐ Site plans, drawings
- ☐ Recording tables
- ☐ Other
- ☐ Feature inserts-No.

This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Site I.D. Site Name First recorded date Importance Aboriginal Information Recorded? No. of instances Recorded by **Feature Description****Type of Grinding Feature**

- ☐ Broad
- ☐ Narrow/point
- ☐ Hollow

☒ Flat

Profile Shape

- ☐ 'U' shaped
- ☐ 'V' shaped
- ☒ Flat

Seed Species PresentRecording date **Groove Function****Dimensions****Smallest**Length (mm) Width (mm) Depth (mm) **Largest**Length (mm) Width (mm) Depth (mm) Groove count Cluster count **Feature Context & Condition**Easting Northing Dimensions of Whole Feature Length (m) Width (m)**Feature Condition**

- ☒ Very good
- ☐ Good
- ☐ Poor

General Condition

- ☒ Weathered
- ☐ Vandalised

General Condition ctd

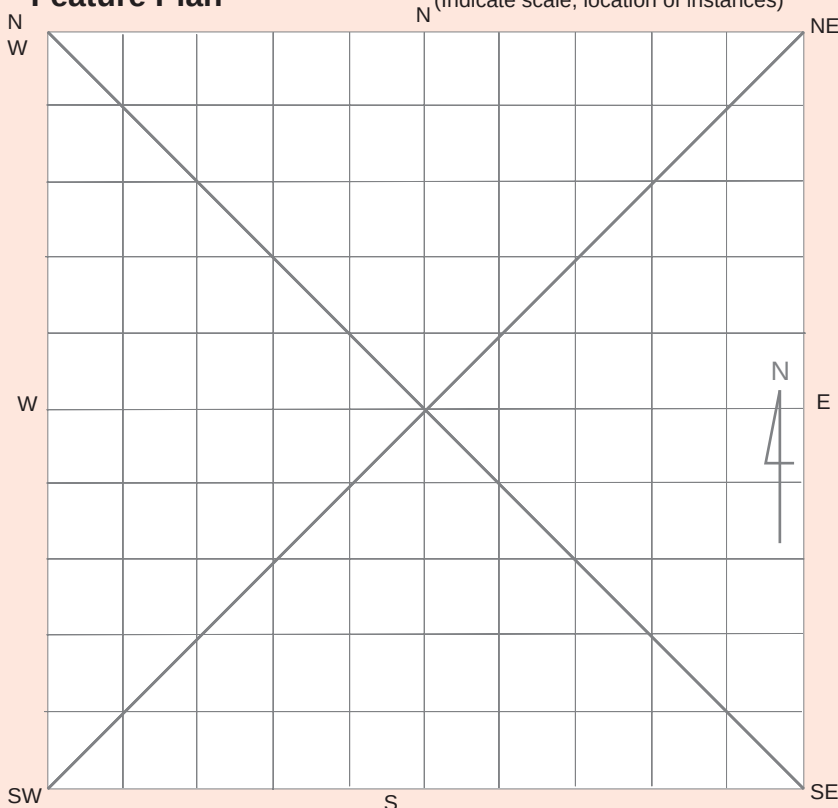
- ☐ Fire damage
- ☒ Surface water wash
- ☐ Graffiti
- ☐ Vehicle damage
- ☐ Erosion
- ☐ Stock damage

Recommended Action

- ☐ Boardwalk
- ☐ Cage/barrier/fencing
- ☐ Closure to public
- ☒ Continued inspection
- ☐ Expert assessment
- ☐ Graffiti removal
- ☐ Meeting with land manager
- ☐ Revegetation
- ☐ Rubbish removal
- ☐ Signage
- ☐ Erosion control
- ☐ Track closure/re-routing
- ☐ Additional recording

Feature Plan

(Indicate scale, location of instances)

**Feature Environment**(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

Land form

Land form unit

Slope

Vegetation

Land use

WaterDistance to permanent water source metresDistance to temporary water source metres

Name of nearest permanent water source

Name of nearest temporary water

Wambo Sites 330, 331 & 332 - Grinding Surfaces possibly for Food Preparation



Photo: View north showing landform in relation to creek line and sheeted sandstone



Photo: View south showing landform in relation to creek line



Photo: Flat lying sheeted sandstone dipping to the south east



Photo: Exposed flat lying sandstone



Photo: Wambo Site 330 Grinding bowl in exposed sandstone



Photo: Wambo Site 331 Grinding bowl in exposed sandstone



Photo: Wambo Site 332 Exposed sandstone to southwest - grinding surface



Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville NSW 2220



Office Use Only

Site Number 3 7 - 5 - 0 6 4 2

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W a m b o S i t e 3 3 4

Easting 3 1 1 8 1 7 Northing 6 3 9 1 8 5 3 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

Organisation

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 10/06/2011

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

Open Site

A 10x10 grid map with compass directions (N, NE, E, SE, S, SW, W, NW) and a north arrow pointing to the right.

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
- ☐ Wind erosion
- ☐ Water erosion
- ☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Condition of Ceiling

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Shelter Aspect

- ☐ North
- ☐ North East
- ☐ East
- ☐ South East
- ☐ South
- ☐ South West
- ☐ West
- ☐ North West

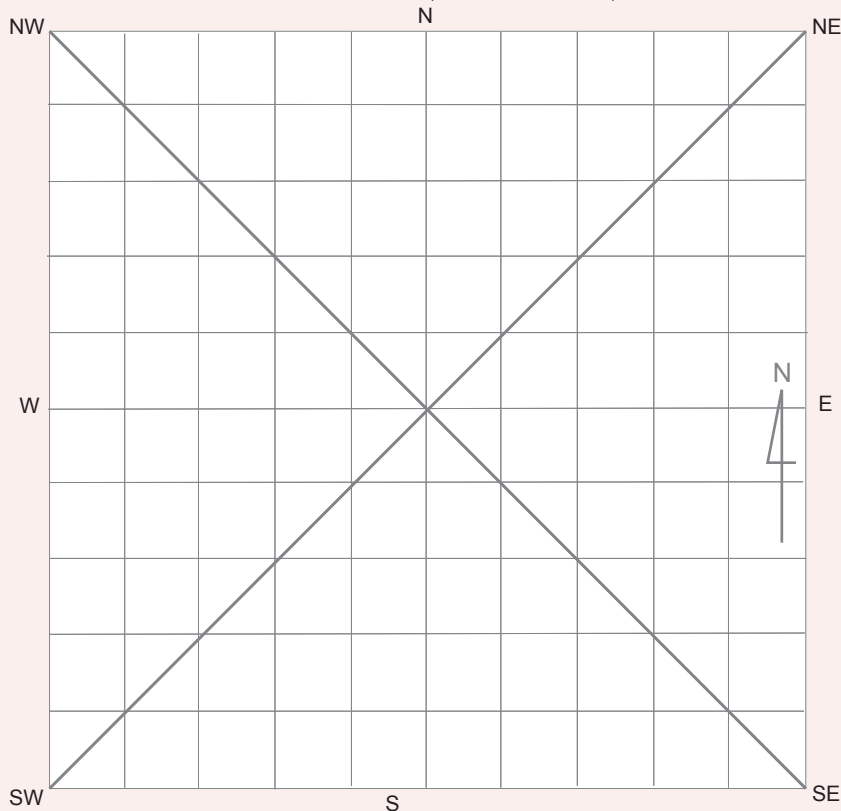
Open Site

Site Orientation

- ☒ N-S
- ☐ NE-SW
- ☐ E-W
- ☐ SE-NW
- ☐ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
- ☐ 2. Aboriginal Resource & Gathering
- ☐ 3. Art
- ☒ 4. Artefact
- ☐ 5. Burial
- ☐ 6. Ceremonial Ring
- ☐ 7. Conflict
- ☒ 8. Earth Mound
- ☐ 9. Fish Trap
- ☐ 10. Grinding Groove
- ☐ 11. Habitation Structure
- ☐ 12. Hearth
- ☐ 13. Non Human Bone & Organic Material
- ☐ 14. Ochre quarry
- ☐ 15. Potential Archaeological Deposit
- ☐ 16. Stone Quarry
- ☐ 17. Shell
- ☐ 18. Stone Arrangement
- ☐ 19. Modified Tree
- ☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
- Internal width
- Shelter height
- Shelter floor area

Open Site Dimensions (m)

- Total length of visible site
- Average width of visible site
- Estimated area of visible site
- Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

Endorsed by: ☐ Knowledge Holder ☐ Nominated Trustee ☐ Native Title Holder ☐ Community Consensus

Initials

[illegible][illegible]

[illegible][illegible][illegible][illegible]

Comments

- ☐ A4 location map
- ☐ B/W photographs
- ☒ Colour photographs
- ☐ Slides
- ☐ Aerial photographs
- ☐ Site plans, drawings
- ☐ Recording tables
- ☐ Other
- ☐ Feature inserts-No.

[illegible]

NPWS FEATURE RECORDING FORM - ARTEFACT

page 1

Site I.D.

Site Name

Wambo Site 334

First recorded date

10/06/2011

Importance

No. of instances

1

Recorded by

RPS

Yes No

Stone artefacts only

No

Artefacts collected

No

Permit issued

No

Percentage of Non-stone Artefacts to Percentage of Stone Artefacts

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% 90-100%

Feature Context & Condition

Scatter No.

1

Easting

3 1 1 8 1 7

Northing

6 3 9 1 8 5 3

Density

Dimensions

(Artefact count per square metre)

6

Length (m)

1.2

Width (m)

0.5

Depth (m)

Yes No

In situ

No

Stratified

No

Feature Condition

General Condition

Recommended Action

☐

Very good

☒

Weathered

☐

Boardwalk

☐

Revegetation

☒

Good

☐

Vehicle damage

☐

Fencing

☐

Signage

☐

Poor

☒

Surface water wash

☐

Closure to public

☐

Soil erosion control

☐

Fire damage

☒

Continued inspection

☐

Track closure/re-routing

☒

Erosion

☐

Fire hazard reduction

☐

Additional recording

☒

Stock damage

☐

Expert assessment

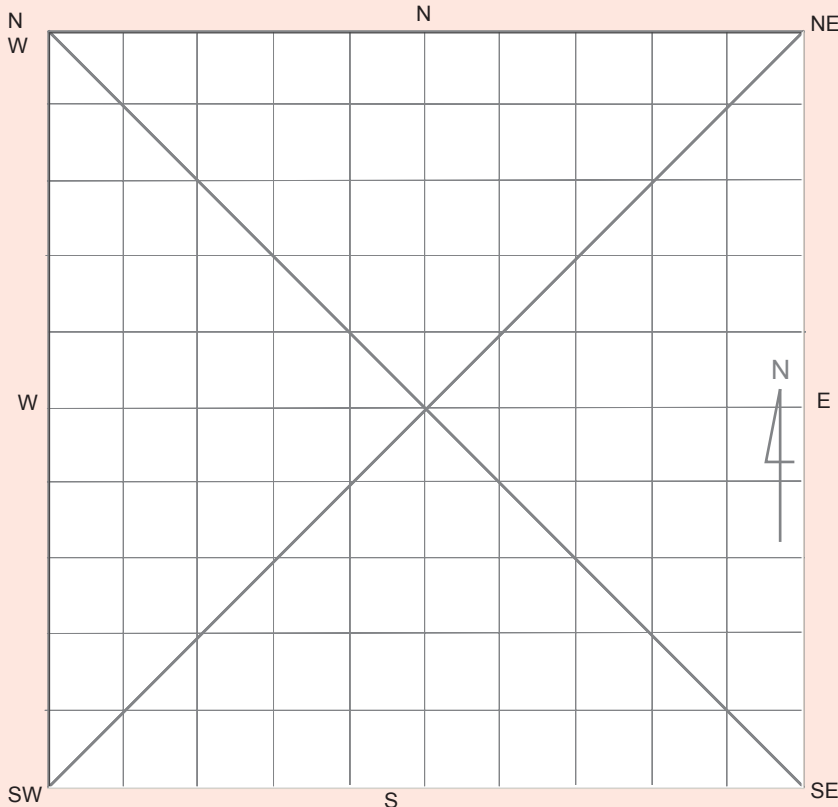
☒

Exposed archaeological material

☐

Meeting with land manager

Feature Plan (Indicate scale, location of instances)



Feature Environment

(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

Upper terrace

Land form

Undulating Plain

Land form unit

gentle

Slope

Eucalyptus woodland

Vegetation

low intensity farming

Land use

Water

Distance to permanent water source 52 metres

Distance to temporary water source metres

Name of nearest permanent water source

Wollombi Brook

Name of nearest temporary water

Wambo Site 334 – Site Description

The Earth Mound 2 (EM2) site was located on the upper terrace and bank of Wollombi Brook which is situated approximately 52 metres to the east of the earth mound. This is a high order permanent stream. EM2 lies just outside of the 40 metre riparian zone. EM2 was on flat-lying ground at the edge of a treed area that extended along the east facing bank of Wollombi Brook. EM2 was aligned in a north to south direction parallel to Wollombi Brook. The earth mound was approximately six metres long by 1.2 metres wide and was approximately half a metre in height. The soils were clayey sand.

The site is situated approximately 50 metres to the east and outside of the Section 87/90 Permit #2222 boundary. A shallow depression was identified to the east of the earth mound.

The vegetation in the area was predominantly Eucalypt woodland and pasture grasses. Disturbances in the area included previous clearing, livestock grazing, and the use of farm vehicles, fencing, ongoing mining works and erosion.

Table: Earth Mound Attributes

ID	Length (m)	Width (m)	Height (m)	Notes
EM2	6	1.2	0.50	A red silcrete flake and a piece of thick black glass were identified on the surface of the earth mound

Photos



Plate 1: EM2 view to the north showing earth mound with leaf litter on the surface of the clayey sand.



Plate 2: EM2 red silcrete flake embedded in the edge of the earth mound.

WARNING: This plan should be used for archival design purposes only. Coordinates of critical points should be taken from the RPS Records.



Legend

- S87-90 Application Area
- Sandstone Outcrops
- Earthmound Extent
- Bleached Sands
- RPS Recorded Sites
- Earth mound/Artefacts
- Grinding Groove
- Artefact Scatter
- Scattered Tree
- Fence Line
- 10m Contour

0 200

metres

Scale: 1:2,000



Aboriginal Site Recording Form

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PO Box 1967, Hurstville NSW 2220



Office Use Only

Site Number 3 | 7 | - | 5 | - | 0 | 6 | 4 | 3

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Geographic Location

Site Name W a m b o S i t e 3 3 5

Easting 3 1 1 8 3 3 Northing 6 3 9 1 8 6 1 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

Organisation

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 10/06/2011

Office Use Only

Client on system

☐

Client on system

☐

Client on system

☐

Open Site

A blank 10x10 grid with compass directions (N, NE, E, SE, S, SW, W, NW) at the corners. A north arrow is located on the right side of the grid.

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
- ☐ Wind erosion
- ☐ Water erosion
- ☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Condition of Ceiling

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Shelter Aspect

- ☐ North
- ☐ North East
- ☐ East
- ☐ South East
- ☐ South
- ☐ South West
- ☐ West
- ☐ North West

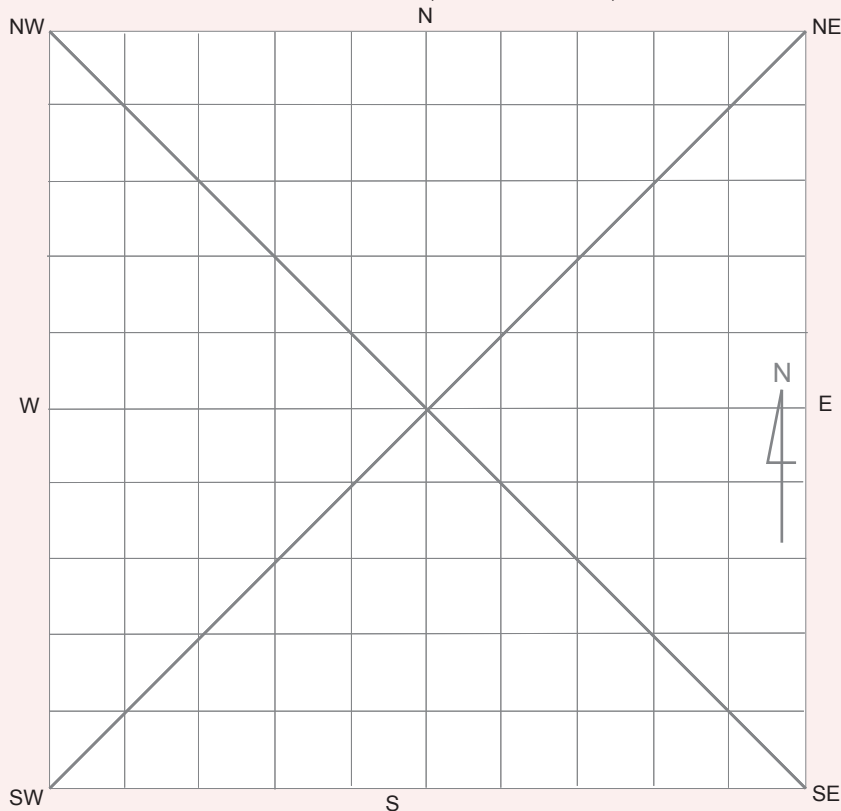
Open Site

Site Orientation

- ☒ N-S
- ☐ NE-SW
- ☐ E-W
- ☐ SE-NW
- ☐ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
- ☐ 2. Aboriginal Resource & Gathering
- ☐ 3. Art
- ☐ 4. Artefact
- ☐ 5. Burial
- ☐ 6. Ceremonial Ring
- ☐ 7. Conflict
- ☒ 8. Earth Mound
- ☐ 9. Fish Trap
- ☐ 10. Grinding Groove
- ☐ 11. Habitation Structure
- ☐ 12. Hearth
- ☐ 13. Non Human Bone & Organic Material
- ☐ 14. Ochre quarry
- ☐ 15. Potential Archaeological Deposit
- ☐ 16. Stone Quarry
- ☐ 17. Shell
- ☐ 18. Stone Arrangement
- ☐ 19. Modified Tree
- ☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
- Internal width
- Shelter height
- Shelter floor area

Open Site Dimensions (m)

- 7 Total length of visible site
- 1.4 Average width of visible site
- Estimated area of visible site
- Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

[illegible]

☐ A4 location map

☐ B/W photographs

☒ Colour photographs

☐ Slides

☐ Aerial photographs

☐ Site plans, drawings

☐ Recording tables

☐ Other

☐ Feature inserts-No.

[illegible]

Wambo Site 335 – Site Description

Earth Mound 1 (EM1) was located on the upper terrace and bank of Wollombi Brook which is situated approximately 37 metres to the east of the earth mound. This is a high order permanent stream and EM1 lies within the 40 metre riparian zone. EM1 was on flat-lying ground within a treed area that extended along the east facing bank of Wollombi Brook. EM1 was aligned in a north to south direction parallel to Wollombi Brook. The earth mound was approximately seven metres long by 1.4 metres wide and was about half a metre in height. The soils were clayey sand.

The site is situated approximately 75 metres to the east and outside of the Section 87/90 Permit #2222 boundary. A shallow depression was identified to the north of the site and a second depression the north west of the site.

The vegetation in the area was predominantly Eucalypt woodland and pasture grasses. Disturbances in the area included previous clearing, livestock grazing, and the use of farm vehicles, fencing, ongoing mining works and erosion. There was a piece of milky quartz on the surface of the soil.

Table: Earth Mound Attributes

ID	Length (m)	Width (m)	Height (m)	Notes
EM1	7	1.4	0.5	There was a piece of milky quartz on the surface of the soil.

Photos



Plate 1: EM1 view to south west showing earth mound with leaf litter on the surface and trees growing at the south western end of the mound.



Plate 2: Milky quartz on surface of earth mound.

WARNING: This plan should be used for archival design purposes only. Coordinates of critical positions should be taken from the RPS Record.



Legend

- S87-90 Application Area
- Sandstone Outcrops
- Earthmound Extent
- Bleached Sands
- RPS Recorded Sites
- Earth mound/Artefacts
- Grinding Groove
- Artefact Scatter
- Scattered Tree
- Fence Line
- 10m Contour

0 200 metres

Scale: 1:2,000



Aboriginal Site Recording Form

AHIMS Registrar
PO Box 1967, Hurstville NSW 2220



Office Use Only

Site Number 3 7 - 5 - 0 6 5 1

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Office Use Only

Client on system

☐

Client on system

☐

Geographic Location

Site Name W A M B O S I T E 3 7 7

Easting 3 1 1 8 1 9 Northing 6 3 9 1 4 6 6 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M S G O O D E G I L L I A N

Organisation R P S

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 06/06/2014

Client on system

☐

OPEN/CLOSE SITE

Open Site

Site Context

Landform

- ☐ Mountainous
- ☒ Plain
- ☐ Rolling hills
- ☐ Steep hills
- ☐ Undulating plain

Landform Unit

- ☐ Beach
- ☐ Coastal rock platform
- ☐ Dune
- ☐ Intertidal flat
- ☐ Lagoon
- ☐ Tidal Creek

- ☐ Tidal Flat
- ☐ Cliff
- ☐ Crest
- ☐ Flat
- ☐ Lower slope
- ☐ Mid slope

- ☐ Upper slope
- ☐ Plain
- ☐ Ridge
- ☐ Tor
- ☐ Valley flat
- ☐ Levy

- ☒ Stream bank
- ☐ Stream channel
- ☐ Swamp
- ☐ Terrace
- ☐ Terrace flat

Slope

 degrees

Vegetation

- ☐ Closed forest
- ☐ Grasslands
- ☐ Isolated clumps of trees
- ☐ Open forest
- ☒ Open woodland
- ☐ Scrub
- ☐ Woodland
- ☐ Cleared
- ☐ Revegetated
- ☐ N/A

Land use

- ☐ Conservation
- ☐ Established urban
- ☐ Farming-intensive
- ☒ Farming-low intensity
- ☐ Forestry
- ☐ Industrial
- ☐ Mining
- ☐ Pastoral/grazing
- ☐ Recreation
- ☐ Semi-rural
- ☐ Service corridor
- ☐ Transport corridor
- ☐ Urban expansion
- ☐ Residential

Water

- Distance to permanent water source

40metres
- Distance to temporary water source

170metres
- Name of nearest permanent water source

Wollombi Brook
- Name of nearest temporary water

South Wambo Ck trib

Directions for Relocation

Refer to DGPS co-ordinates

Current Land Tenure

- ☐ Public

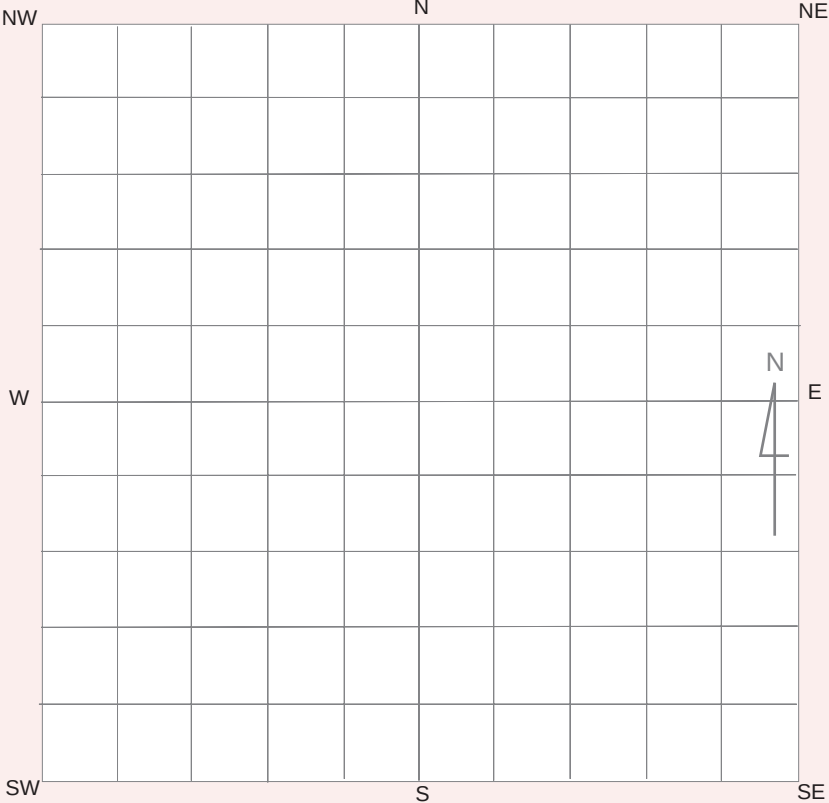
National Park / other Government Dept.
- ☒ Private

WAMBO COAL MINE

Primary report

I.D. (I.D. Office Use only)

Site Location Map



General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
- ☐ Wind erosion
- ☐ Water erosion
- ☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Condition of Ceiling

- ☐ Boulder
- ☐ Sandstone platform
- ☐ Silica gloss
- ☐ Tessellated
- ☐ Weathered
- ☐ Other platform

Shelter Aspect

- ☐ North
- ☐ North East
- ☐ East
- ☐ South East
- ☐ South
- ☐ South West
- ☐ West
- ☐ North West

Open Site

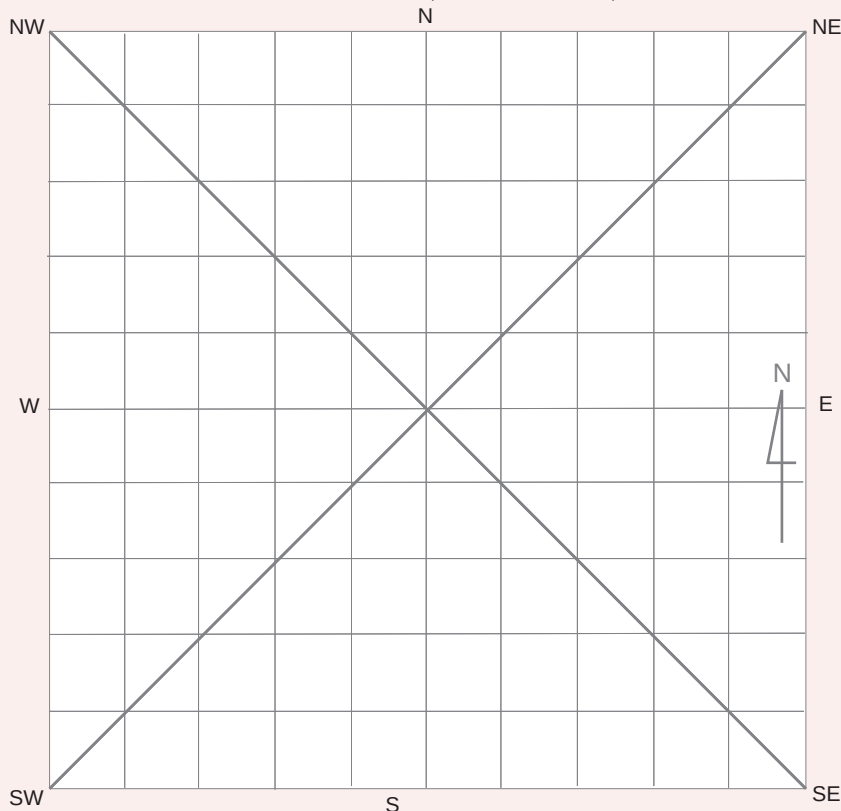
Site Orientation

- ☒ N-S
- ☐ NE-SW
- ☐ E-W
- ☐ SE-NW
- ☐ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
- ☐ 2. Aboriginal Resource & Gathering
- ☐ 3. Art
- ☐ 4. Artefact
- ☐ 5. Burial
- ☐ 6. Ceremonial Ring
- ☐ 7. Conflict
- ☐ 8. Earth Mound
- ☐ 9. Fish Trap
- ☒ 10. Grinding Groove
- ☐ 11. Habitation Structure
- ☐ 12. Hearth
- ☐ 13. Non Human Bone & Organic Material
- ☐ 14. Ochre quarry
- ☐ 15. Potential Archaeological Deposit
- ☐ 16. Stone Quarry
- ☐ 17. Shell
- ☐ 18. Stone Arrangement
- ☐ 19. Modified Tree
- ☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features



Site Dimensions

Closed Site Dimensions (m)

- Internal length
- Internal width
- Shelter height
- Shelter floor area

Open Site Dimensions (m)

- 2 m Total length of visible site
- 2 m Average width of visible site
- 4 sq m Estimated area of visible site
- 4 m Length of assessed site area

[illegible]

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

[illegible]

☒ A4 location map
☐ B/W photographs
☒ Colour photographs
☐ Slides
☐ Aerial photographs
☐ Site plans, drawings
☐ Recording tables
☐ Other
☐ Feature inserts-No.

[illegible]

Site I.D.		Site Name	WAMBO SITE 377
First recorded date	6 June 2014	Importance	Contributes to primary site importa
No. of instances	1		
Recorded by	GG		
	Yes No		
Stone artefacts only	No	Percentage of Non-stone Artefacts to Percentage of Stone Artefacts	
Artefacts collected	No	0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% 90-100%	
Permit issued	No	0-9%	

Feature Context & ConditionScatter No. Easting Northing **Density****Dimensions**

Yes No

(Artefact count per square metre)

Length (m)

Width (m)

Depth (m)

In situ

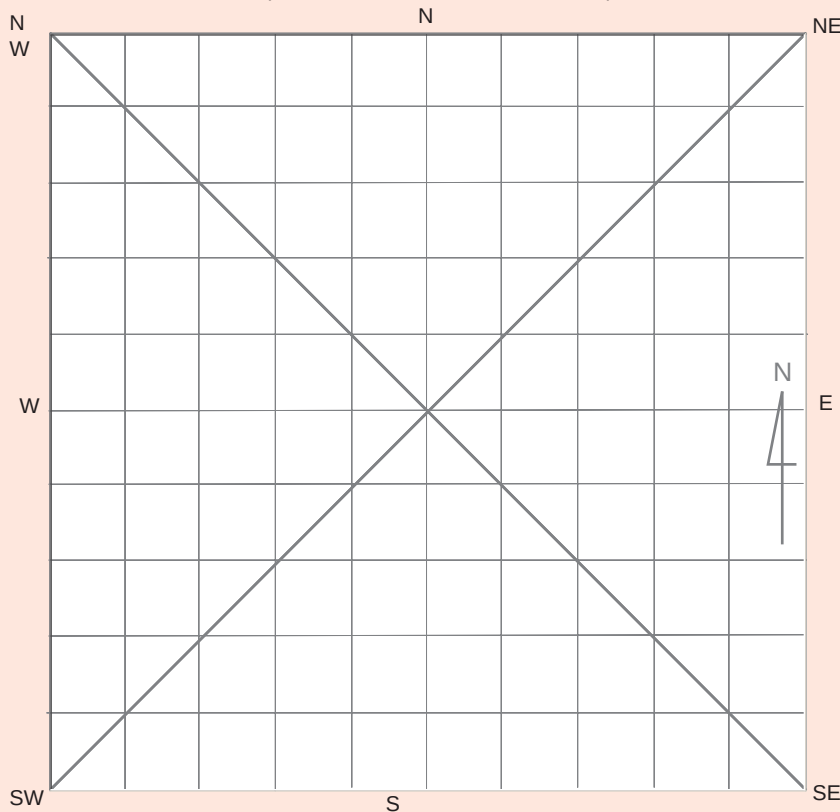
Stratified

Feature Condition**General Condition****Recommended Action**

- ☐ Very good
- ☒ Good
- ☐ Poor

- ☒ Weathered
- ☐ Vehicle damage
- ☐ Surface water wash
- ☐ Fire damage
- ☐ Erosion
- ☐ Stock damage
- ☒ Exposed archaeological material

- ☐ Boardwalk
- ☐ Fencing
- ☐ Closure to public
- ☒ Continued inspection
- ☐ Fire hazard reduction
- ☐ Expert assessment
- ☐ Meeting with land manager
- ☐ Revegetation
- ☐ Signage
- ☐ Soil erosion control
- ☐ Track closure/re-routing
- ☐ Additional recording

Feature Plan (Indicate scale, location of instances)**Feature Environment**(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

- Land form
- Land form unit
- Slope
- Vegetation
- Land use

WaterDistance to permanent water source metresDistance to temporary water source metres

Name of nearest permanent water source

Name of nearest temporary water

Table: Artefact Attributes

[illegible]

Photos



Wambo Site 377 Single Grinding Groove in flat lying sandstone



Wambo Site 377 Grinding groove lying north to south on the surface of flat lying sandstone adjacent and to the west of a natural water hole in jointed blocky sandstone



Aboriginal Site Recording Form



AHIMS Registrar
PO Box 1967, Hurstville NSW 2220

Office Use Only

Site Number 3 | 7 | - | 5 | - | 0 | 6 | 5 | 2

Date received / / Date entered into system / / Date catalogued / /

Entered by (I.D.)

Information Access

☐ Gender/male ☐ Gender/female ☐ Location restriction ☐ General restriction ☐ No access

For Further Information Contact:

☐ Nominated Trustee

Title Surname First Name Initials

Organisation

Address

Phone number Fax

☐ Knowledge Holder

Title Surname First Name Initials

Organisation

Address

Phone number Fax

Aboriginal Heritage Unit or Cultural Heritage Division Contacts

Office Use Only

Client on system

☐

Client on system

☐

Geographic Location

Site Name W A M B O S I T E 3 7 8

Easting 3 1 1 0 3 9 Northing 6 3 9 0 3 8 0 AGD/GDA GDA

Mapsheet D O Y L E S C R E E K

Zone 56 Location Method Differential GPS

Other Registration

Primary Recorder

Title Surname First Name Initials

M S G O O D E G I L L I A N

Organisation R P S

Address P O B O X 4 2 8 H A M I L T O N N S W 2 3 0 3

Phone number 2 4 9 4 0 4 2 0 0 Fax 2 4 9 6 1 6 7 9 4

Date recorded 06/06/2014

Client on system

☐

Open Site

Landform

Slope
 degrees

- ☐ Beach
- ☐ Coastal rock platform
- ☐ Dune
- ☐ Intertidal flat
- ☐ Lagoon
- ☐ Tidal Creek

- ☐ Upper slope
- ☐ Plain
- ☐ Ridge
- ☐ Tor
- ☐ Valley flat
- ☐ Levy

- ☐ Stream bank
- ☐ Stream channel
- ☐ Swamp
- ☐ Terrace
- ☐ Terrace flat

Water

☐ Closed forest

☐ Grasslands

☒ Isolated clumps of trees

☐ Open forest

☐ Open woodland

☐ Scrub

☐ Woodland

☐ Cleared

☐ Revegetated

☐ N/A

- ☐ Conservation
- ☐ Established urban
- ☐ Farming-intensive
- ☒ Farming-low intensity
- ☐ Forestry
- ☐ Industrial
- ☐ Mining
- ☐ Pastoral/grazing
- ☐ Recreation
- ☐ Semi-rural
- ☐ Service corridor
- ☐ Transport corridor
- ☐ Urban expansion
- ☐ Residential

Distance to permanent water source	210	metres
Distance to temporary water source	360	metres
Name of nearest permanent water source	South Wambo Ck	
Name of nearest temporary water	Wollombi Brook trib	

☐ Public National Park / other Government
Dept.

✓	Private	WAMBO COAL MINE

I.D. (I.D. Office Use only)

[illegible]

Refer to DGPS co-ordinates

A 10x10 grid map with cardinal directions (N, S, E, W) and a compass rose in the bottom right corner.

General Site Information

Closed Site

Shelter/Cave Formation

- ☐ Boulder
☐ Wind erosion
☐ Water erosion
☐ Rock collapse

Rock Surface Condition

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Condition of Ceiling

- ☐ Boulder
☐ Sandstone platform
☐ Silica gloss
☐ Tessellated
☐ Weathered
☐ Other platform

Shelter Aspect

- ☐ North
☐ North East
☐ East
☐ South East
☐ South
☐ South West
☐ West
☐ North West

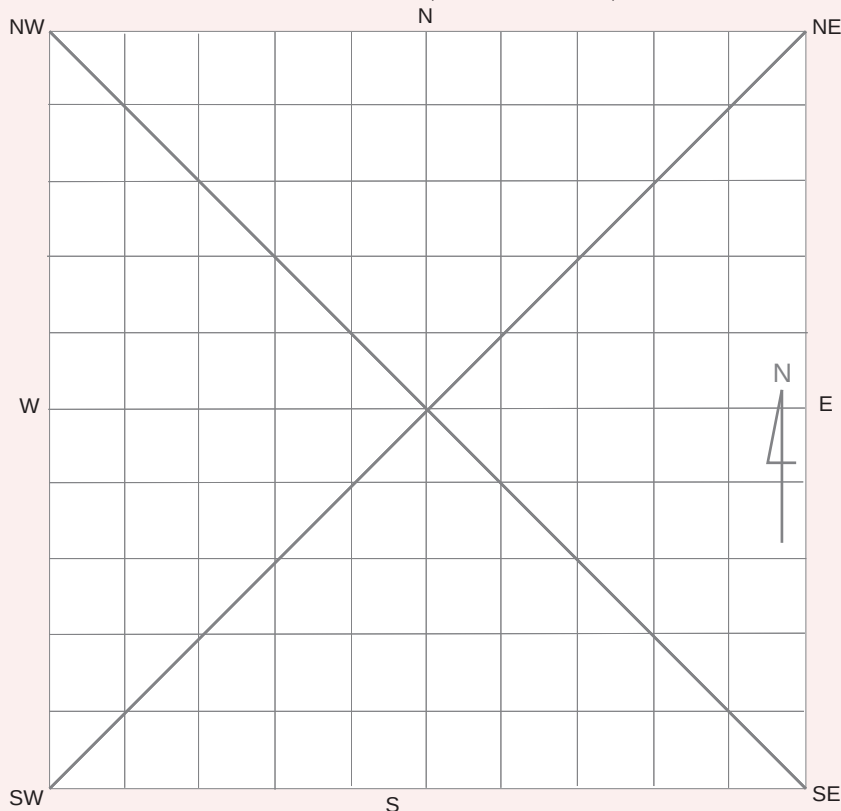
Open Site

Site Orientation

- ☐ N-S
☐ NE-SW
☐ E-W
☐ SE-NW
☒ N/A

Features

- ☐ 1. Aboriginal Ceremony & Dreaming
☐ 2. Aboriginal Resource & Gathering
☐ 3. Art
☒ 4. Artefact
☐ 5. Burial
☐ 6. Ceremonial Ring
☐ 7. Conflict
☐ 8. Earth Mound
☐ 9. Fish Trap
☐ 10. Grinding Groove
☐ 11. Habitation Structure
☐ 12. Hearth
☐ 13. Non Human Bone & Organic Material
☐ 14. Ochre quarry
☐ 15. Potential Archaeological Deposit
☐ 16. Stone Quarry
☐ 17. Shell
☐ 18. Stone Arrangement
☐ 19. Modified Tree
☐ 20. Water Hole

Site Plan Indicate scale, boundaries of site, features

Site Dimensions

Closed Site Dimensions (m)

- Internal length
 Internal width
 Shelter height
 Shelter floor area

Open Site Dimensions (m)

- Total length of visible site
 Average width of visible site
 Estimated area of visible site
 Length of assessed site area

This image shows a blank sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is a margin at the top, and the entire sheet is framed by a thin black border.

Site Cultural & Scientific Analysis and Preliminary Management Recommendations

[illegible]

☒ A4 location map
☐ B/W photographs
☒ Colour photographs
☐ Slides
☐ Aerial photographs
☐ Site plans, drawings
☐ Recording tables
☐ Other
☐ Feature inserts-No.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There is a vertical margin line on the left side, creating a narrow left margin. The paper appears to be from a notebook or a standard ruled document.

NPWS FEATURE RECORDING FORM - ARTEFACT

page 1

Site I.D.

Site Name

WAMBO SITE 378

First recorded date

6 June 2014

Importance

Cannot be presently determined

No. of instances

1

Recorded by

GG

Yes No

Stone artefacts only

Yes

Artefacts collected

No

Permit issued

No

Percentage of Non-stone Artefacts to Percentage of Stone Artefacts

0-9% 10-19% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% 80-89% 90-100%

0-9%

Feature Context & Condition

Scatter No.

1

Easting

3 1 1 0 3 9

Northing

6 3 9 0 3 8 0

Density

Dimensions

Yes No

(Artefact count per square metre)

1

1

Length (m)

1

Width (m)

0

Depth (m)

In situ

No

Stratified

No

Feature Condition

General Condition

Recommended Action

☐

Very good

☒

Weathered

☐

Boardwalk

☐

Revegetation

☐

Good

☐

Vehicle damage

☐

Fencing

☐

Signage

☒

Poor

☒

Surface water wash

☐

Closure to public

☐

Soil erosion control

☐

Fire damage

☒

Continued inspection

☐

Track closure/re-routing

☒

Erosion

☐

Fire hazard reduction

☐

Additional recording

☒

Stock damage

☐

Expert assessment

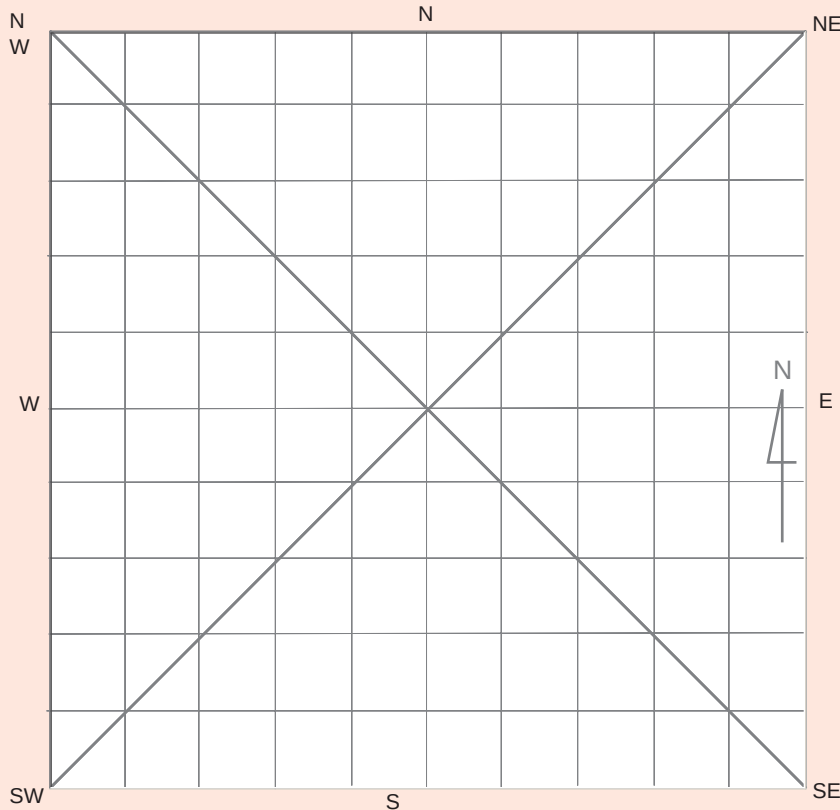
☐

Exposed archaeological material

☐

Meeting with land manager

Feature Plan (Indicate scale, location of instances)



Feature Environment

(Complete when *feature* environment differs to *site* environment, use attributes from cover card, p. 2)

Undulating Plain

Land form

Lower Slope

Land form unit

North West

Slope

Grassland

Vegetation

Grazing

Land use

Water

Distance to permanent water source

210

metres

Distance to temporary water source

360

metres

Name of nearest permanent water source

South Wambo Creek

Name of nearest temporary water

Wollombi Brook tributary

Table: Artefact Attributes

[illegible]

Photos



Wambo site 378 Isolated yellow mudstone flake scraper



Wambo Site 378 Gentle north west facing slope

Appendix 6

Historic Heritage Searches

Search Results

66 results found.

Abbey Green Homestead Group Putty Rd	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
All Saints Anglican Church Group High St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Arderseir and Garden Maitland Rd	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Baroona Homestead, Outbuildings & Garden Range Rd	Whittingham via Singleton, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Beckers Bridge Glendon Brook Gresford Rd	Glendon Brook, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Boer War Memorial Obelisk Elizabeth St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Bon Accord 7-9 George St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Caledonian Hotel 38-40 George St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Chain of Ponds Hotel and Outbuildings Old Singleton Rd	Liddell, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Club House Hotel 142 John St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)

Club House Hotel Group John St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Convent of Mercy (Current Buildings) Queen St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Convent of Mercy (Original Building) Queen St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Convent of Mercy Group Queen St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Council Chambers (former) 74 George St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Crail House Howe St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Criterion Hotel 148 John St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Dalwood and Surrounds Dalwood Rd	Branxton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Elderslie Road Bridge Branxton Rd	Elderslie, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Ewbank and Outbuildings 88 George St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Foybrook Cross Beds New England Hwy	Ravensworth, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)

Glenayr Including Fence 1A Kent St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Glendon Area Glendon Rd	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Glendon Homestead and Sites of Outbuildings Glendon Rd	Glendon via Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Gondwana Rainforests of Australia	Lismore, NSW, Australia	(Declared property) World Heritage List
Gondwana Rainforests of Australia	Lismore, NSW, Australia	(Listed place) National Heritage List
Greenwood and Outbuildings Greenwood St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Hambledon Hill Homestead Hambledon Hill Rd	Singleton, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Indigenous Place	Bulga, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Indigenous Place	Jerry's Plains, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Indigenous Place	Putty, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Jerry's Plains Church, School and Police Station Group	Jerry's Plains, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Lambs Valley Lambs Valley Rd	Stanhope, NSW, Australia	(Indicative Place) Register of the National Estate

MacDonald Valley / Wollombi Valley Area	St Albans, NSW, Australia	(Non-statutory archive) (Indicative Place) Register of the National Estate (Non-statutory archive)
Middle Falbrook Road Bridge Rixs Creek Falbrook Rd	Middle Falbrook via Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Milbrodale Estate Original Homestead Putty Rd	Milbrodale via Bulga, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Minimbah House Whittingham Broke Rd	Whittingham Via Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Moreton Bay Fig Tree Queen St	Singleton, NSW, Australia	(Removed from Register or IL) Register of the National Estate (Non-statutory archive)
Mount Leonard Estate Homestead Broke Whittingham Rd	Broke, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Murinbin House Group Broke Rd	Broke, NSW, Australia	(Interim List) Register of the National Estate (Non-statutory archive)
Murinbin House Group Broke Rd	Broke, NSW, Australia	(Listed place) Commonwealth Heritage List
Neotsfield Homestead Gardens Racecourse La (off)	Whittingham via Singleton, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Pelerin 11 Edinburgh Ave	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Percy Hotel 65-67 George St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory

Police Station Doyle St	Jerrys Plains, NSW, Australia	archive) (Registered) Register of the National Estate (Non-statutory archive)
Public School Doyle St	Jerrys Plains, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Railway Station Munro St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Ravensworth / Liddell Geological Site Ravensworth Liddell Rd	Liddell, NSW, Australia	(Removed from Register or IL) Register of the National Estate (Non-statutory archive)
Ravensworth Homestead Hebden Rd	Ravensworth, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
Redbourneberry Bridge Singleton Gresford Rd	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
School Residence Doyle St	Jerrys Plains, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Shire Council Technical Offices George St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Singleton Conservation Area	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Singleton Courthouse 39 Elizabeth St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Singleton Post Office and Stables (former) 25A-27 George St	Singleton, NSW, Australia	(Registered) Register of the

Singleton Showground Group Bathurst St	Singleton, NSW, Australia	National Estate (Non-statutory archive) (Indicative Place) Register of the National Estate (Non-statutory archive)
St Andrews Anglican Church Wollombi St	Broke, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
St James Anglican Church Pagan St	Jerrys Plains, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
St Patricks Catholic Church Queen St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Strowan Denman Rd	Jerry s Plains, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
The Blue Mountains	Katoomba, NSW, Australia	(Indicative Place) Register of the National Estate (Non-statutory archive)
The Greater Blue Mountains Area Great Western Hwy	Katoomba, NSW, Australia	(Declared property) World Heritage List
The Greater Blue Mountains Area Greater Western Hwy	Katoomba, NSW, Australia	(Listed place) National Heritage List
The Greater Blue Mountains Area - Additional Values Great Western Hwy	Katoomba, NSW, Australia	(Nominated place) National Heritage List
Wade Cottage 25-27 Bishopsgate St	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)
Wollemi National Park (1980 boundary) The Putty Rd	Singleton, NSW, Australia	(Registered) Register of the National Estate (Non-statutory archive)



You are here: [Home](#) > [Heritage sites](#) > [Searches and directories](#) > NSW heritage search

Search for NSW heritage

[Return to search page where you can refine/broaden your search.](#)

Statutory listed items

Information and items listed in the State Heritage Inventory come from a number of sources. This means that there may be several entries for the same heritage item in the database. For clarity, the search results have been divided into two sections.

- Section 1. contains items listed by the heritage council under the NSW Heritage Act. This includes listing on the state heritage register, an interim heritage order or protected under section 136 of the NSW Heritage Act. This information is provided by the Heritage Branch.
- Section 2. contains items listed by local councils & shires and state government agencies. This section may also contain additional information on some of the items listed in the first section.

Section 1. Items listed under the NSW Heritage Act.

Your search returned 12 records.

Item name	Address	Suburb	LGA	SHR
Beckers Bridge over Webbers Creek	Main Road 128	West Gresford	Singleton	01457
Bulga Bridge over Wollombi Brook	Main Road 213	Bulga	Singleton	01459
Dalwood House and surrounds of Wyndham Estate	Dalwood Road	Branxton	Singleton	00377
Ewbank & Outbuildings	88 George Street	Singleton	Singleton	00174
Inn & Outbuildings (former)	Old New England Highway	Chain of Ponds	Singleton	00242
Middle Falbrook Bridge over Glennies Creek	Rixs Creek-Falbrook Road	Middle Falbrook	Singleton	01474
Neotsfield	Neotsfield Lane	Whittingham	Singleton	00216
Post Office (former)	25-27 George Street	Singleton	Singleton	00478
Singleton District Hospital	25 Dangar Road	Singleton	Singleton	00833
Singleton Railway Station group	Main Northern railway	Singleton	Singleton	01246
St. Patrick's Roman Catholic Church Cemetery	Queen Street	Singleton	Singleton	00233
Wambo Homestead		Warkworth	Singleton	00200

Section 2. Items listed by Local Government and State Agencies.

Your search returned 174 records.

Item name	Address	Suburb	LGA	Information source

Abbey Green and Outbuildings	Putty Road	Singleton	Singleton	GAZ
All Saints Anglican Church	High Street	Singleton	Singleton	GAZ
All Saints Parish Hall	Goulburn Street	Singleton	Singleton	GAZ
All Saints Rectory	High Street	Singleton	Singleton	GAZ
Anglican Church	Mirannie Road	Reedy Creek	Singleton	GAZ
Anglican Timber Church		Glendon	Singleton	GAZ
Archerfield outbuildings	Archerfield Road	Warkworth	Singleton	GAZ
Ardersier	Maitland Road	Singleton	Singleton	GAZ
Arrowfield	Piribil Street	Jerrys Plains	Singleton	GAZ
Bakery (former)	85 John Street	Singleton	Singleton	GAZ
Baroona & outbuildings		Whittingham	Singleton	GAZ
Bebeah	Waddell's Lane	Singleton	Singleton	GAZ
Beckers Bridge Over Webbers Creek, Gresford West	Gresford-glendon Brook Rd	Gresford (West)	Singleton	SGOV
Belford Public School (former)	Bell Road	Belford	Singleton	GAZ
Ben Glen	4 Elizabeth Street	Singleton	Singleton	GAZ
Bendeich Cottage	Stanhope Road	Stanhope	Singleton	GAZ
Blaxland House	Fordwich Road	Broke	Singleton	GAZ
Boer War Memorial	75 George Street	Singleton	Singleton	GAZ
Bon Accord	7-9 George Street	Singleton	Singleton	GAZ
Bowman Street Trees	Bowman Street	Singleton	Singleton	GAZ
Brick Farm House	Jerry's Plain Road	Mount Thorley	Singleton	GAZ
Brick Shed	Soapsuds Lane	Singleton	Singleton	GAZ
Brougham Place	4 Goulburn Street	Singleton	Singleton	GAZ
Buen Vista	3 View Street	Singleton	Singleton	GAZ
Bulga Bridge Over Wollombi Brook	Secondary Road 503	Bulga	Singleton	SGOV
Bulga Police Station and Official	Windsor Road	Bulga	Singleton	SGOV

Residence				
Bundarra	37 Elizabeth Street	Singleton	Singleton	GAZ
Burdekin Medical Centre	90 George Street	Singleton	Singleton	GAZ
Burdekin Park	George Street	Singleton	Singleton	GAZ
Caledonian Hotel	38-40 George Street	Singleton	Singleton	GAZ
Camberwell Glennies Creek Underbridge	252.613kms Main Northern Railway	Camberwell	Singleton	SGOV
Catron	Dunolly Road	Singleton	Singleton	GAZ
Chain of Ponds Hotel (former)	Old Singleton Road	Liddell	Singleton	GAZ
Charlton	Cobcroft Road	Bulga	Singleton	GAZ
Church of the Good Shepherd	Bell Road	Belford	Singleton	GAZ
Clifford & Stafor Homesteads ruins only	Long Point Road	Warkworth	Singleton	GAZ
Club House Hotel Group	148 John Street	Singleton	Singleton	GAZ
Commercial Premises	58 George Street	Singleton	Singleton	GAZ
Commercial Premises & Residence	49 George Street	Singleton	Singleton	GAZ
Commercial Premises & Residence	42-44 George Street	Singleton	Singleton	GAZ
Community Arts & Crafts Learning Centre	74 George Street	Singleton	Singleton	GAZ
Community Hall CI		Camberwell	Singleton	GAZ
Corinda House Farm	Corinda Street	Belford	Singleton	GAZ
Cottage	16 View Street	Singleton	Singleton	GAZ
Courthouse & Associated Buildings	39 Elizabeth Street	Singleton	Singleton	GAZ
Crail House	Howe Street	Singleton	Singleton	GAZ
Cranston House	28 Dangar Road	Singleton	Singleton	GAZ
Cyril Moxhams House	1910 Hambledon Hill Road	Wylies Flat	Singleton	GAZ
Dangar Mausoleum	High Street	Singleton	Singleton	GAZ
Dulwich	Middle Falbrook Road	Nundah	Singleton	GAZ

Dunolly Ford Bridge	New England Highway	Singleton	Singleton	GAZ
Elderslie Bridge Over Hunter River	Regional Road 453	Singleton/Elderslie	Singleton	SGOV
Elderslie Bridge over Hunter River	Branxton Road (MR 220)	Elderslie	Singleton	GAZ
Fairholme	16 Broughton Street	Singleton	Singleton	GAZ
Federation Bungalow	14 View Street	Singleton	Singleton	GAZ
Flowerbank	8 Flowerbank Close	Singleton	Singleton	GAZ
Frome	Frome Close	Singleton	Singleton	GAZ
Gates & Gate Lodge (former)	New England Highway	Whittingham	Singleton	GAZ
General Cemetery		Broke	Singleton	GAZ
Geraldine & Medical Centre	68 High Street	Singleton	Singleton	GAZ
Glen Nevis	Westbrook Road	Westbrook	Singleton	GAZ
Glenayr	1 Kent Street	Singleton	Singleton	GAZ
Glendon & outbuildings		Glendon	Singleton	GAZ
Glennies Creek Dam	Glennies Creek	Singleton	Singleton	SGOV
Glenridding Presbyterian Church & Cemetery	Putty Road	Singleton	Singleton	GAZ
Gould Brothers Timber Mill	1 Kelso Street	Singleton	Singleton	GAZ
Greater Newcastle Building Society	94 John Street	Singleton	Singleton	GAZ
Greenwood & outbuildings	Greenwood Lane	Singleton	Singleton	GAZ
Greylands & outbuildings	Goorangoola Road	Goorangoola	Singleton	GAZ
Hotel Ruins		Warkworth	Singleton	GAZ
House	12 View Street	Singleton	Singleton	GAZ
House	5, 36 William Street	Singleton	Singleton	GAZ
House	26, 27, 37 Dangar Road	Singleton	Singleton	GAZ
House	26 Elizabeth Street	Singleton	Singleton	GAZ
House Group	17-19 Campbell Street	Singleton	Singleton	GAZ
Jack Daniels Tavern	142 John Street	Singleton	Singleton	GAZ

Jerry's Plais Roman Catholic Church	Pagan Street	Jerrys Plains	Singleton	GAZ
Johnsons Cottage	Stanhope Road	Stanhope	Singleton	GAZ
Kath's Cottage	228 John Street	Singleton	Singleton	GAZ
Kirkton Winery & Vineyard site	Standen Drive	Belford	Singleton	GAZ
Lairmont Hotel (former)	Maitland Road	Singleton	Singleton	GAZ
Leconfield	Dalwood Road	Branxton	Singleton	GAZ
Lonsdale	10-12 Dangar Road	Singleton	Singleton	GAZ
Lych Gate, All Saints Anglican Church	High Street	Singleton	Singleton	GAZ
Manresa	Singleton-Gresford	Glendon Brook	Singleton	GAZ
Maria Immaculate Roman Catholic Church		Broke	Singleton	GAZ
Masonic Hall	219 John Street	Singleton	Singleton	GAZ
Merah	259 John Street	Singleton	Singleton	GAZ
Methodist Sunday School Hall	2 Elizabeth Street	Singleton	Singleton	GAZ
Middle Falbrook Bridge Over Glennies Creek	Rixs Creek, Falbrook Rd	Middle Falbrook	Singleton	SGOV
Milbrodale Estate	Putty Road	Milbrodale	Singleton	GAZ
Minimbah House and Outbuildings		Whittingham	Singleton	GAZ
Mount Leonard	Putty Road	Bulga	Singleton	GAZ
Mount Leonards Public School now Scout Hall	Putty Road	Bulga	Singleton	GAZ
Museum, Sisters of Mercy Convent	Queen Street	Singleton	Singleton	GAZ
New Freugh Ruin	Bell Road	Belford	Singleton	GAZ
Office & Residence	25-27 George Street	Singleton	Singleton	GAZ
Old Anglican Cemetery	Piribil Street	Jerrys Plains	Singleton	GAZ
Pelerin	30 Edinburgh	Singleton	Singleton	GAZ

	Avenue			
Pelham Residence	30 Bishopgate Street	Singleton	Singleton	GAZ
Percy Hotel	65-67 George Street	Singleton	Singleton	GAZ
Pines Cafe	26 George Street	Singleton	Singleton	GAZ
Pizza Hut & Offices	57 George Street	Singleton	Singleton	GAZ
Police Station	22 Hunter Street	Singleton	Singleton	GAZ
Police Station	Doyle Street	Jerrys Plains	Singleton	GAZ
Police Station (former)	79 York Street	Singleton	Singleton	GAZ
Post Office & Store	Pagan Street	Jerrys Plains	Singleton	GAZ
Presbyterian Church Property Trust	Elizabeth Street	Singleton	Singleton	GAZ
Public School	New England Highway	Ravensworth	Singleton	GAZ
Public School	Doyle Street	Jerrys Plains	Singleton	GAZ
Public School Group	31 Elizabeth Street	Singleton	Singleton	GAZ
Pumping Station (former)	Waterworks Lane	Singleton	Singleton	GAZ
Queen Street Cemetery	Queen Street	Singleton	Singleton	GAZ
Queen Victoria Inn Ruins (former)	Jerry's Plains Road	Warkworth	Singleton	GAZ
Ravensworth Homestead	(not given)	Ravensworth	Singleton	GAZ
Redbournberry Bridge	Redbournberry Road	Redbournberry	Singleton	GAZ
Redbournberry Bridge Over Hunter River	Regional Road 128	Redbournberry	Singleton	SGOV
Residence	257 John Street	Singleton	Singleton	GAZ
Residence	4, 8 Cambridge Street	Singleton	Singleton	GAZ
Residence	55 Pitt Street	Singleton	Singleton	GAZ
Residence	8, 24-26 Hunter Street	Singleton	Singleton	GAZ
Residence	66 York Street	Singleton	Singleton	GAZ
Residence	96 George Street	Singleton	Singleton	GAZ
Residence	65 High Street	Singleton	Singleton	GAZ
Residence	17 Bathurst Street	Singleton	Singleton	GAZ
Residences	3-5 Macquarie Street	Singleton	Singleton	GAZ

Residential Cottage	11 Campbell Street	Singleton	Singleton	GAZ
Richards Family Cemetery		Dawsons Hill	Singleton	GAZ
Rixs Creek Coke Ovens & Associated Works	New England Highway	Rixs Creek	Singleton	GAZ
Roman Catholic Presbytery	6 Patrick Street	Singleton	Singleton	GAZ
Roselands Uniting Church	Goorangoola Road	Goorangoola	Singleton	GAZ
Royal Hotel	86 George Street	Singleton	Singleton	GAZ
Shop	76-78 George Street	Singleton	Singleton	GAZ
Showground group	Church Street	Singleton	Singleton	GAZ
Singleton Courthouse	Elizabeth Street	Singleton	Singleton	SGOV
Singleton District Hospital	Howe Street	Singleton	Singleton	SGOV
Singleton Fire Station	Pitt Street	Singleton	Singleton	SGOV
Singleton High School	York Street	Singleton	Singleton	GAZ
Singleton Historical Society Museum	George Street	Singleton	Singleton	GAZ
Singleton Hunter River Underbridge	Main Northern Railway	Singleton	Singleton	SGOV
Singleton Inn	John Street	Singleton	Singleton	GAZ
Singleton Mowers Commercial Shop	32 George Street	Singleton	Singleton	GAZ
Singleton Police Station	22 Hunter Street	Singleton	Singleton	SGOV
Singleton Presbyterian Church Hall	7 Elizabeth Street	Singleton	Singleton	GAZ
Singleton Railway Precinct	Munro Lane	Singleton	Singleton	SGOV
Singleton Railway Precinct	Munro Lane	Singleton	Singleton	SGOV
Singleton Railway Station	Munro Street	Singleton	Singleton	GAZ
Sisters of Mercy Convent Building and Chapel School	Queen Street	Singleton	Singleton	GAZ
Spottiswood	Mirannie Road	Westbrook	Singleton	GAZ
St Andrews	Church Street	Singleton	Singleton	GAZ

Uniting Church				
St. Clement's Anglican Church		Camberwell	Singleton	GAZ
St. Elmo	Castlereagh Street	Singleton	Singleton	GAZ
St. James Anglican Church	Pagan Street	Jerrys Plains	Singleton	GAZ
St. Patrick's Roman Catholic Church	Queen Street	Singleton	Singleton	GAZ
St. Philip's Church		Warkworth	Singleton	GAZ
St. Vincent De Paul Society Shop	13-15 Campbell Street	Singleton	Singleton	GAZ
Strowan	Piribil Street	Jerrys Plains	Singleton	GAZ
Tennis Club	Edinburgh Avenue	Singleton	Singleton	GAZ
Terraces	37-39 Macquarie Street	Singleton	Singleton	GAZ
The Singleton Arcade	71-75 John Street	Singleton	Singleton	GAZ
The Woolpack Inn	Maitland Road / New England Highway	Singleton	Singleton	GAZ
Timber House	89 Castlereagh Street	Singleton	Singleton	GAZ
Townhead Estate	5 Townhead Crescent	Singleton	Singleton	GAZ
Uniting Church of Australia	Church Street	Singleton	Singleton	GAZ
Wade Cottage	25-27 Bishopgate Street	Singleton	Singleton	GAZ
War Memorial	75 George Street	Singleton	Singleton	GAZ
War Memorial		Broke	Singleton	GAZ
War Memorial Gates	Inlet Road	Bulga	Singleton	GAZ
Warromean	Glendon Road	Scotts Flat	Singleton	GAZ
Water Tower	12 View Street	Singleton	Singleton	GAZ
Westpac Bank & Shop	110-112 John Street	Singleton	Singleton	GAZ
White Heather	11 Macquarie Street	Singleton	Singleton	GAZ
Wittingham Anglican Cemetery	Haggerteys Lane	Singleton	Singleton	GAZ
Woodbourne	20 Elizabeth Street	Singleton	Singleton	GAZ

There was a total of 186 records matching your search criteria.

Key:

LGA = Local Government Area

GAZ= NSW Government Gazette (statutory listings prior to 1997), HGA = Heritage Grant Application, HS = Heritage Study, LGOV = Local Government, SGOV = State Government Agency.

Note: The Heritage Branch seeks to keep the State Heritage Inventory (SHI) up to date, however the latest listings in Local and Regional Environmental Plans (LEPs and REPs) may not yet be included. Always check with the relevant local council or shire for the most recent listings.

Singleton Local Environmental Plan 2013

Current version for 10 January 2014 to date (accessed 20 June 2014 at 12:43)

Schedule 5

<< page >>

Schedule 5 Environmental heritage

(Clause 5.10)

Part 1 Heritage items

Suburb	Item name	Address	Property description	Significance	Item no
Belford	Former Belford Public School	96 Bell Road	Lot 1, DP 111478	Local	I1
Branxton	“Dalwood” homestead, outbuildings and surrounds of Wyndham Estate	Dalwood Road	Lot 1, DP 739349	State	I2
Broke	Albert Hall	1260 Broke Road	Lot 1, DP 1146108	Local	I3
Broke	General cemetery	1260 Charlton Road (corner Butlers Road)	Part Lot 59, DP 755270	Local	I4
Broke	War memorial	19 Wollombi Street (Stewart McTaggart Park)	Part Lot 7001, DP 93462	Local	I5
Broke	Maria Immaculate Roman Catholic Church	26–28 Wollombi Street	Lots 1 and 2, Section 17, DP 758164	Local	I6
Broke	St Andrew’s Anglican Church	36 Wollombi Street	Lot 1, Section 25, DP 758164	Local	I7
Bulga	Bulga Bridge	213 Main Road	Road reserve	State	I8
Bulga	Mt Leonard Public School	2099 Putty Road	Lot 64, DP 753821	Local	I10
Bulga	“Mount Leonard”	2201 Putty Road	Part Lot 7, DP 10022	Local	I9
Bulga	War memorial gates	19 The Inlet Road	Lot 1, DP 949442	Local	I11
Camberwell	St Clement’s Anglican Church	20 Glennies Road	Lot 103, DP 738182	Local	I12
Camberwell	Community hall	3 Lethbridge Street	Lot 2, Section 13, DP 758214	Local	I13
Elderslie	Elderslie Bridge	Elderslie Road	Road reserve	Local	I14
Fordwich	“Charlton”	154 Cobcroft Road	Lot 18, DP 10022	Local	I15
Glendon	St Mary’s Anglican Timber Church	85 Glendon Lane	Lot 1, DP 1005810	Local	I16
Glendon	“Glendon” and outbuildings	923 Glendon Road	Lot 3, DP 563490	Local	I17
Glendon Brook	“Manresa”	1316 Glendonbrook Road	Lot 142, DP 831191	Local	I18
Glennies Creek	“Kangory” homestead (formerly “Dulwich”)	485 Middle Falbrook Road	Lot 8, DP 246434	Local	I19
Glenridding	Glenridding Presbyterian Church Cemetery	Putty Road	Part Lot 1, DP 910418	Local	I20
Glenridding	Former pumping station	55 Waterworks Lane		Local	I21

Gowrie	Gowrie Private Cemetery	3 Hambledon Hill Road	Part Lot 4, DP 873262	Local	I22
Greenlands	“Greylands” and outbuildings	665 Goorangoola Road	Lot 111, DP 1085409	Local	I23
Hambledon Hill	“Hambledon Hill”	535 Hambledon Hill Road	Lot 3, DP 749894	Local	I24
Jerrys Plains	Police station	26–30 Doyle Street	Lots 14–16, Section 4, DP 758542	Local	I26
Jerrys Plains	Police station	27–31 Doyle Street	Lot 4, Section 7, DP 758542	Local	I25
Jerrys Plains	Post office and store	13 Pagan Street	Lot 6, Section 5, DP 758542	Local	I27
Jerry Plains	St James’ Anglican Church	27–31 Pagan Street	Lots 5–7, DP 1147127	Local	I28
Jerrys Plains	Jerrys Plains Catholic Church	45–47 Pagan Street	Lots 5 and 6, Section 1, DP 758542	Local	I29
Jerrys Plains	“Arrowfield” estate	The Golden Highway	Lot 13, DP 861359	Local	I31
Jerrys Plains	Old Anglican cemetery	The Golden Highway	Lot 11, DP 658775	Local	I30
Jerrys Plains	“Strowan”	3065 The Golden Highway	Part Lot 2, DP 771461	Local	I32
Leconfield	“Leconfield House”	394B Dalwood Road	Lot 20, DP 598808	Local	I33
Liddell	Inn and outbuildings	Old New England Highway	Lot 211, DP 975271	State	I34
Lower Belford	Church of the Good Shepherd	267 Bell Road	Lot 1, DP 102405	Local	I35
Lower Belford	“Corinda House”, farm and ruins	215 Corinda Drive	Lot 21, DP 1133596	Local	I36
Middle Falbrook	Middle Falbrook Bridge	Middle Falbrook Road	Road reserve	State	I37
Mt Royal	Richards Family Cemetery	Off Goorangoola Creek Road	Lot 57, DP 752471	Local	I38
Mt Thorley	“Abbey Green” and outbuildings	478 Putty Road	Part Lot 44, DP 755269	Local	I39
Mt Thorley	Brick farm house	The Golden Highway	Lot 1, DP 130275	Local	I40
Ravensworth	Former public school	Hebden Road	Lot 11, DP 825904	Local	I42
Ravensworth	Ravensworth Homestead	463 Hebden Road	Lot 228, DP 752470	Local	I41
Redbournberry	Redbournberry Bridge over Hunter River	128 Main Road	Road reserve	Local	I43
Reedy Creek	St John the Baptist Anglican Church	1540 Mirannie Road	Lot 1, DP 1105393	Local	I44
Rixs Creek	Coke ovens	New England Highway	Lot 2, DP 598097; Lot 4, DP 1123099	Local	I45
Roughit	“Warromeen”	359 Roughit Lane	Lot 1, DP 245730	Local	I46
Singleton	Residence	17 Bathurst Street	Lot 1, DP 996823	Local	I47
Singleton	Showground group	32 Bathurst Street	Lot 1, DP 933470; Lots 1–3, DP 1140421; Lot 1, DP 1139953; Lot 1, DP 151195; Lot 1, DP 1140404; Lot 1, DP 1140337	Local	I48
Singleton	Wade Cottage	25 Bishopsgate Street	Lot 1, DP 771421	Local	I49

Singleton	Pelham residence	30 Bishopsgate Street	Lot 1, DP 199759	Local	I50
Singleton	Bowman Street trees	Bowman Street	Road reserve	Local	I51
Singleton	“Fairholme”	16–18 Broughton Street	Lot 1, DP 199309	Local	I52
Singleton	Residence	4 Cambridge Street	Lot 2, DP 151194	Local	I53
Singleton	Residence	8 Cambridge Street	Lot 1, DP 194570	Local	I54
Singleton	Dunolly Ford Bridge	Campbell Street and Dunolly Road	Road reserve	Local	I55
Singleton	Residential cottage	11a Campbell Street	Lot 2, DP 733306	Local	I56
Singleton	Commercial premises	13 Campbell Street	Lot 1, DP 656262	Local	I57
Singleton	House group	15–19 Campbell Street	Lot 1, DP 196572; Lot 1, DP 196537; Lot 1, DP 928496; Lot 1, DP 328478	Local	I58
Singleton	“St Elmo”	54 Castlereagh Street	Lot 4, DP 553890	Local	I59
Singleton	Timber house	89 Castlereagh Street	Lot A, DP 38004	Local	I60
Singleton	Former St Andrew’s Church	2–2a Church Street	Lot 1, DP 195920; Lot 2, DP 779308	Local	I61
Singleton	“Lonsdale”	10–12 Dangar Road	Lot 2, DP 585278	Local	I62
Singleton	House	26 Dangar Road	Lot 3, DP 381574	Local	I63
Singleton	House	27 Dangar Road	Lot 171, DP 581535	Local	I64
Singleton	Cranston House	28 Dangar Road	Lot 3, DP 543903	Local	I65
Singleton	House	37 Dangar Road	Lot 11, DP 628659	Local	I66
Singleton	Tennis Club	8a Edinburgh Avenue	Lot 8, DP 251429	Local	I67
Singleton	Singleton Historical Society Museum	Elizabeth Street (Burdekin Park)	Lot 76, DP 755269	Local	I73
Singleton	Presbyterian Church Property Trust group —church, Sunday school hall, “Bel Glen”, church hall and residence	2–4 and 7–9 Elizabeth Street and 8 Hunter Street	Lot 1, DP 943861; Lot 1, DP 779244; Lot 1, DP 779529; Lot 1, DP 197958; Lot 202, DP 738557	Local	I68
Singleton	“Woodbourne”	20 Elizabeth Street	Lot A, DP 384509	Local	I69
Singleton	House	26 Elizabeth Street	Lot 1, DP 782127	Local	I70
Singleton	“Bundarra”	37 Elizabeth Street	Lot 37, DP 851568	Local	I71
Singleton	Courthouse and associated buildings	39 Elizabeth Street		Local	I72
Singleton	“Flowerbank”	8 Flowerbank Close	Lot 220, DP 536530	Local	I74
Singleton	“Frome”	2 Frome Close	Lot 18, DP 241977	Local	I75
Singleton	“Bon Accord”	7–9 George Street	Lot 2412, DP 839237	Local	I76
Singleton	Office and residence	21–25 George Street	Lot 1, DP 1085091	Local	I77
Singleton	Former post office	25–27 George Street	Lot 2, DP 224862	State	I79
Singleton	Pines Cafe	26 George Street	Lot 245, DP 996981	Local	I78
Singleton	Singleton Mowers, commercial shop	32 George Street	Lot 1, DP 734048	Local	I80
Singleton	Caledonian Hotel	38–40 George Street	Lot 1, DP 780886	Local	I81
Singleton	Former commercial premises and residence	42–44 George Street	Lot 1, DP 770152	Local	I82
Singleton	Commercial premises and residence	45–49 George Street	Lot 1, DP 82025	Local	I83
Singleton	Former Patrick Plains	57–63 George Street	Lot 10, DP 1094251	Local	I84

	Shire Building, commercial shop and offices				
Singleton	Commercial premises	58 George Street	Lot A, DP 152130	Local	I85
Singleton	Percy Hotel	65–67 George Street	Lot 11, DP 708484	Local	I86
Singleton	Mechanics Institute	74 George Street	Lot 7, DP 1128892	Local	I87
Singleton	Burdekin Park group —Burdekin Park, Boer War Memorial and war memorial	75 George Street	Lot 7, DP 755269	Local	I88
Singleton	Shop	76–78 George Street	Lot 1, DP 742063	Local	I89
Singleton	Royal Hotel	86 George Street	Lot 1, DP 601666	Local	I90
Singleton	“Ewbank” and outbuildings	88 George Street	Lot 11, DP 1044753	State	I91
Singleton	Burdekin Medical Centre	90 George Street	Lot 1, DP 742851	Local	I92
Singleton	Residence	96 George Street	Lot 1, DP 196051	Local	I93
Singleton	Brougham Place	4 Goulburn Street	Lots 27 and 28, Section 21, DP 758906	Local	I94
Singleton	“Greenwood” and outbuildings	100 Greenwood Avenue	Lot 1, DP 1110673	Local	I95
Singleton	All Saints Church group—All Saints Church, All Saints Rectory, Parish Hall, Dangar Mausoleum and Lych Gate	40 High Street	Lots 305–310 and 347–350, DP 758906; Lots 3–6, DP 1105049	Local	I96
Singleton	Residence	65 High Street	Lot 1, DP 194832	Local	I97
Singleton	“Geraldine” and medical centre	68 High Street	Lot A, DP 369086	Local	I98
Singleton	Singleton District Hospital	Howe Street	Lots 13–26, Section 7, DP 3347	State	I99
Singleton	Crail House	50 Howe Street	Lot 101, DP 731759	Local	I100
Singleton	Public school group	12 Hunter Street	Lot 26, DP 189781	Local	I101
Singleton	Police station	22 Hunter Street	Lot 22, DP 1138656	Local	I102
Singleton	Residences	24–26 Hunter Street	Lot 24, DP 1103729; Lot 100, DP 819377	Local	I103
Singleton	The Singleton Arcade	71–75 John Street	Lots 1–3, DP 211882	Local	I104
Singleton	Former bakery	85 John Street	Lot 2, DP 555869	Local	I105
Singleton	Greater Newcastle Building Society	94 John Street	Lot A, DP 340218	Local	I106
Singleton	Westpac Bank and shop	110–112 John Street	Lot 101, DP 621162	Local	I107
Singleton	Club House Hotel	142 John Street	Lots 1 and 2, DP 113121	Local	I108
Singleton	Criterion Hotel	148 John Street	Lot 1, DP 737682	Local	I109
Singleton	Masonic Hall	217 John Street	Lot 1, DP 196174	Local	I110
Singleton	“Kath’s Cottage”, residence	228 John Street	Lot 1, DP 999546	Local	I111
Singleton	Residence	245–255 John Street	Lot 11, DP 869314	Local	I112
Singleton	“Merah”	259 John Street	Lot 1, DP 775551	Local	I113
Singleton	Gould Brothers	1 Kelso Street	Lots 1–3, DP 1121727	Local	I114

	Timber Mill				
Singleton	“Glenayr”	1a Kent Street	Lot 1, DP 995639	Local	I115
Singleton	Residences (terraces)	3–5 Macquarie Street	Lots 21 and 22, DP 539780	Local	I116
Singleton	“White Heather”	11 Macquarie Street	Lot 7, DP 663979	Local	I117
Singleton	“Ardersier”	48 Maitland Road	Lot 323, DP 818758	Local	I118
Singleton	Singleton Railway Station group	Munro Street	Part Lot 1, DP 1050582	State	I119
Singleton	“Bebeah”	New England Highway	Lot 101, DP 1048703	Local	I120
Singleton	Roman Catholic Presbytery	2 Patrick Street	Lot 6, DP 1070881	Local	I121
Singleton	“Pelerin”	30 Pelerin Avenue	Lot 22, DP 836833	Local	I122
Singleton	“Catron”	1 Philip Street	Lot 1, DP 741457	Local	I123
Singleton	Singleton Fire Station	1A Pitt Street	Lot 2, DP 998256	Local	I124
Singleton	Public school	55 Pitt Street	Lot 2, DP 998256	Local	I125
Singleton	St Patrick’s Roman Catholic Church Cemetery	Queen Street	Lot 3, DP 533557	State	I128
Singleton	St Patrick’s Church	28 Queen Street	Lot 1, DP 533557	Local	I126
Singleton	Sisters of Mercy Convent group—museum, convent building and convent chapel school	28–38 and 40–44 Queen Street	Lots 201 and 203, DP 1042655; Lot 22, DP 1063169	Local	I127
Singleton	Townhead Estate	5 Townhead Crescent	Lot 9, DP 572512	Local	I129
Singleton	“Buena Vista”	3 View Street	Lot 341, DP 999155	Local	I130
Singleton	House	12 View Street	Lot 1, DP 1040378	Local	I131
Singleton	Water tower	12A View Street	Part Lot 12, Section B, DP 758906	Local	I132
Singleton	Federation bungalow	14 View Street	Lot 1, DP 196526	Local	I133
Singleton	Cottage	16 View Street	Lot 1, DP 195062	Local	I134
Singleton	House	5 William Street	Lot 51, DP 1085381	Local	I135
Singleton	House	36 William Street	Lot 143, DP 800753	Local	I136
Singleton	Residence	66 York Street	Lot 1, DP 731544	Local	I137
Singleton	Singleton High School	75–81 York Street	Lot 1, DP 799071	Local	I138
Singleton	Former police station	83–87 York Street	Lot 1, DP 861563	Local	I139
Stanhope	Johnsons Cottage	426 Stanhope Road	Lot 6, DP 37389	Local	I140
Warkworth	“Archerfield” and outbuildings	Off Comleroi Road	Lot 2, DP 876447	Local	I141
Warkworth	St Phillip’s Church	Off High Road	Part Lot 21, DP 755267	Local	I143
Warkworth	“Stafford”, homestead and “Clifford”, homestead (ruins)	Long Point—West Road	Lot 25, DP 58779	Local	I142
Warkworth	“Wambo” homestead and outbuildings	Off The Golden Highway	Lot 82, DP 548749	State	I144
West Gresford	Beckers Bridge	218 Main Road	Road reserve	State	I147
Westbrook	“Spottiswood”	462B Mirannie Road	Lot 90, DP 730286	Local	I145
Westbrook	“Glen Nevis”	399 Westbrook Road	Lot 11, DP 1002203	Local	I146
Whittingham	Whittingham Anglican Cemetery	Cemetery Lane	Lot 48, DP 1116691	Local	I148
Whittingham	“Minimbah” and	119B Minimbah Road	Lot 1, DP 355861	Local	I149

	outbuildings				
Whittingham	“Neotsfield”	Neotsfield Lane	Lot 36, DP 876398	Local	I150
Whittingham	Former gates and gate lodge (“Neotsfield”)	4244 New England Highway	Lot 1, Section A, DP 10096	Local	I152
Whittingham	Former Lairmont Hotel	4253 New England Highway	Lot 1, DP 399230	Local	I153
Whittingham	“The Woolpack Inn”	3 Newington Lane	Lot 1, DP 1122748	Local	I151
Whittingham	“Baroona” and outbuildings	7c Range Road	Lot 8, DP 1129005	Local	I154
Wylies Flat	Cyril Moxham’s House	34 Trefolly Road	Part Lot 21, DP 862013	Local	I155

Part 2 Heritage conservation areas

Name of heritage conservation area	Identification on <u>Heritage Map</u>	Significance
Jerrys Plains	Shown with red hatching and labelled “C1”	Local
Singleton	Shown with red hatching and labelled “C2”	Local

Part 3 Archaeological sites

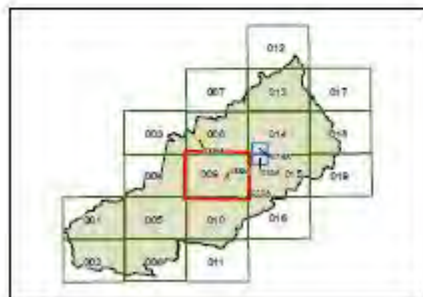
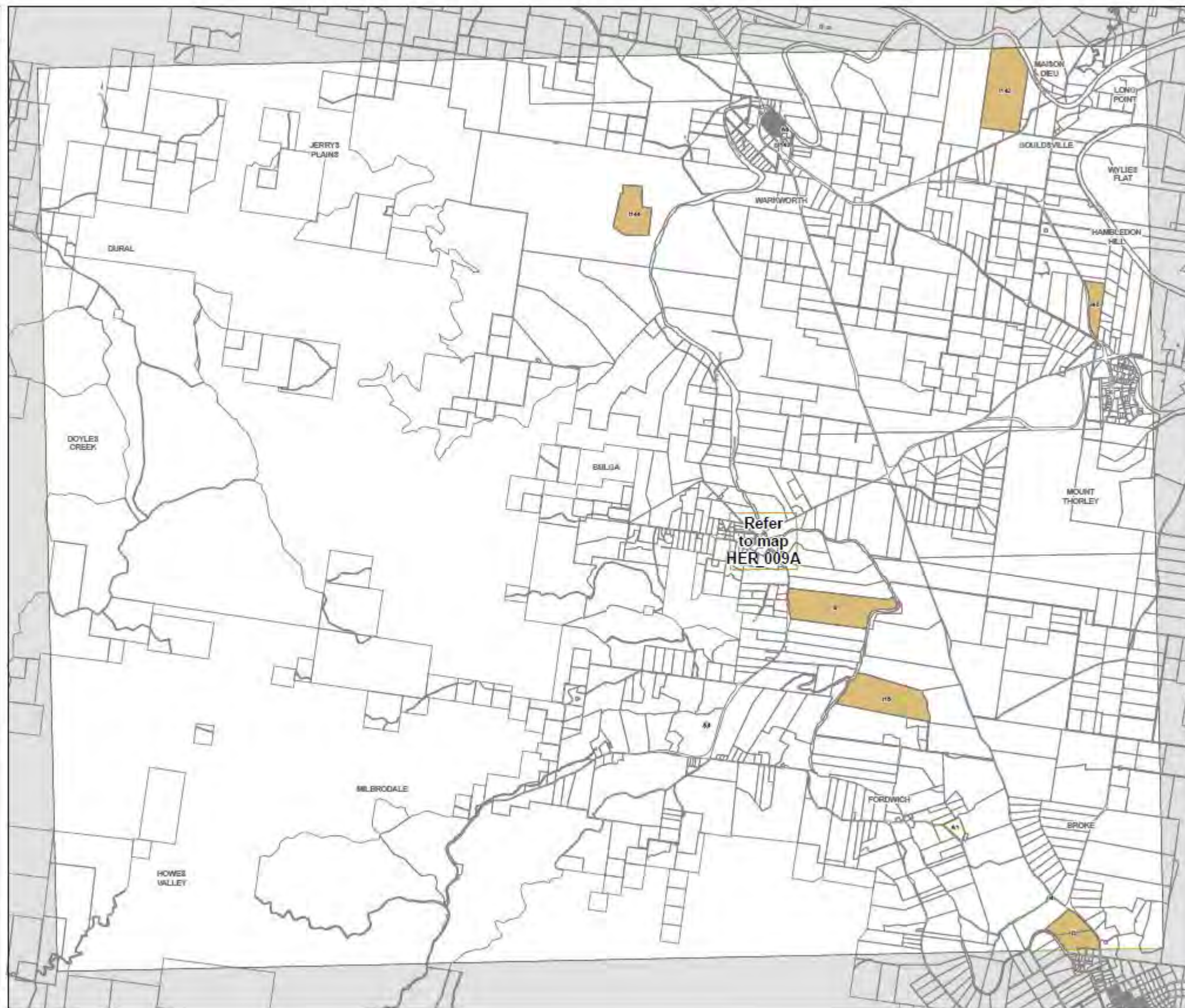
Suburb	Item name	Address	Property description	Significance	Item no
Broke	Blaxland’s House	4 Fordwich Road	Lot 4, DP 615819	Local	A1
Lower Belford	“New Freugh”, ruin	Off Corinda Drive	Lot 4, DP 956769	Local	A2
Lower Belford	“Kirkton”, winery and vineyard site (ruins)	616 Corinda Drive	Lot 62, DP 539631	Local	A3
Milbrodale	“Milbrodale”, estate	2544 Putty Road	Lot 51, DP 601485	Local	A4
Singleton	Former Singleton Inn	232 John Street	Lot 7002, DP 93616	Local	A5
Warkworth	Former Queen Victoria Inn (ruins)	Jerrys Plains Road	Lot 1, DP 770904	Local	A6

Heritage

-  Conservation Area - General
 Item - General
 Item - Archaeological

Cadastre

-  Cadastre 08/03/2013 ©
Land and Property Information (LPI)



Projection: GDA 1994
Zone 58

Scale: 1:80,000 @ A3

Map Identification Number: 7000.COM.HER.009.000.20130729

Appendix 7

Extract of Aboriginal Assessment Section from the Subsidence Assessment (MSEC, 2014)

6.14. Wambo Homestead Complex

The Wambo Homestead Complex is located north of the Study Area. The Curtilage for the complex is located at a minimum distance of 300 metres from the finishing end of WMLW10A and is shown in Drawing No. MSEC697-12. The building structures associated with the complex are located more than 1 kilometre from the proposed longwall.

The maximum predicted incremental vertical subsidence within the Curtilage, resulting from the extraction of WMLW10A, is in the order of survey tolerance (i.e. not measureable). It is unlikely, therefore, that there would be any adverse impacts within the Curtilage, including to the building structures associated with the Wambo Homestead Complex, even if the predictions were exceeded by a factor of 2 times.

6.15. Archaeological Sites

6.15.1. Descriptions of the Archaeological Sites

There are no lands within the Study Area declared as an Aboriginal Place under the *National Parks and Wildlife Act 1974*. There are a number of archaeological sites which have been identified within the Study Area which are shown in Drawing No. MSEC697-12. A summary of these archaeological sites is provided in Table 6.12 below.

Table 6.12 Archaeological Sites within the Study Area

Site Name	Location	Description
Site 40	100 metres east of WMLW10A	Artefact scatter
Site 41	130 metres east of WMLW10A	Artefact scatter
Site 42	115 metres south of WMLW10A	Artefact scatter
Site 336	Above the maingate of WMLW10A	Artefact scatter
Site 363	25 metres south-west of WMLW10A	Artefact scatter
Site 371	Directly above WMLW10A	Isolated Find
Site 372	Directly above WMLW10A	Isolated Find
Site 373	45 metres east of WMLW10A	Isolated Find
Site 374	Directly above WMLW10A	Isolated Find

The archaeological sites within the Study Area comprise artefact scatters and isolated finds. Other areas of archaeological significance were also identified within the Study Area including *Bleached Sand* and *Sandstone Outcrops*. There are grinding groove sites located outside and to the east of the Study Area and a scarred tree located outside and to the north of the Study Area. Descriptions of the archaeological sites within the Study Area are provided in the report by RPS (2014).

6.15.2. Predictions for the Archaeological Sites

The predicted total conventional subsidence, tilts and curvatures for the archaeological sites within the Study Area, based on the *Approved Layout* and the *Modified Layout*, are provided in Table D.01, in Appendix D. The values are based on the extraction of the approved and proposed longwalls within the Wambo Seam and the future longwalls in the Arrowfield and Bowfield Seams (i.e. excluding the predicted movements resulting from the existing workings in the Whybrow Seam). These predictions do, however, include the effects of these existing workings on the subsidence which develops from the mining in the Wambo Seam, Arrowfield and Bowfield Seams.

A summary of the maximum predicted additional subsidence, tilts and curvatures for the archaeological sites, due to the extraction of the proposed WMLW10A, is provided in Table 6.13. The predictions include the effects of the existing workings in the overlying Whybrow Seam.

Table 6.13 Maximum Predicted Additional Subsidence, Tilts and Curvatures for the Archaeological Sites due to the Extraction of the Proposed WMLW10A

Location	Longwall	Maximum Predicted Additional Subsidence (mm)	Maximum Predicted Additional Tilt (mm/m)	Maximum Predicted Additional Hogging Curvature (km ⁻¹)	Maximum Predicted Additional Sagging Curvature (km ⁻¹)
Artefact Scatters	WMLW10A Only	100	5	0.4	0.07
Isolated Finds	WMLW10A Only	1,500	30	2.5	2.9
Bleached Sand	WMLW10A Only	1,200	50	2.5	2.5
Sandstone Outcrops	WMLW10A Only	< 20	< 0.5	< 0.01	< 0.01

The archaeological sites are located across the Study Area and, therefore, could experience the full range of predicted strains. The analysis of strains measured in the Hunter Coalfield, for previously extracted longwalls having similar width-to-depth ratios as the proposed longwall, is provided in Section 4.4.

Non-conventional movements can also occur and have occurred in the NSW Coalfields as a result of, amongst other things, anomalous movements. The analysis of strains provided in Chapter 4 includes those resulting from both conventional and non-conventional anomalous movements.

6.15.3. Comparisons of Predictions for the Archaeological Sites

The comparison of the maximum predicted conventional subsidence parameters for the archaeological sites within the Study Area, based on the *Approved Layout* and the *Modified Layout*, is provided in Table 6.14. The values are based on the extraction of the approved and proposed longwalls within the Wambo Seam and the future longwalls in the Arrowfield and Bowfield Seams (i.e. excluding the predicted movements resulting from the existing workings in the Whybrow Seam). However these comparisons include the effects of these existing workings on the subsidence which develops from the mining in the Wambo Seam, Arrowfield and Bowfield Seams.

Table 6.14 Comparison of the Maximum Predicted Subsidence Parameters for the Archaeological Sites due to Mining in Wambo, Arrowfield and Bowfield Seams

Layout	Location	Maximum Predicted Total Conventional Subsidence (mm)	Maximum Predicted Total Conventional Tilt (mm/m)	Maximum Predicted Total Conventional Hogging Curvature (km ⁻¹)	Maximum Predicted Total Conventional Sagging Curvature (km ⁻¹)
Approved Layout	Artefact Scatters	800	15	0.5	0.03
	Isolated Finds	4,500	35	0.5	1.0
	Bleached Sand	3,700	50	0.7	0.8
	Sandstone Outcrops	1,900	40	0.7	0.4
Modified Layout	Artefact Scatters	900	20	0.9	0.5
	Isolated Finds	4,500	55	3.0	3.0
	Bleached Sand	3,700	55	3.0	3.0
	Sandstone Outcrops	1,900	40	0.7	0.4

It can be seen from the above table, that the maximum predicted subsidence parameters for the artefact scatters, isolated finds and the bleached sand, based on the Modified Layout, are greater than those predicted based on the Approved Layout. The maximum predicted subsidence parameters for the sandstone outcrops do not change as a result of the proposed modification. Further discussions on the potential impacts on these sites due to the extraction of the additional proposed longwall are provided in the following section.

6.15.4. Impact Assessments for the Artefact Scatters and Isolated Finds

There are five sites comprising artefact scatters within the Study Area, being Sites 40, 41, 42, 336 and 363. There are also four sites comprising isolated finds within the Study Area, being Sites 371, 372, 373 and 374.

The maximum predicted total tilt for the artefact scatters and isolated finds due to mining in the Wambo, Arrowfield and Bowfield Seams, based on the *Modified Layout*, is 55 mm/m (i.e. 5.5 %), which represents a change in grade of 1 in 18. The maximum predicted additional tilt, due to the proposed modification, is 30 mm/m (i.e. 3.3 %), which represents a change in grade of 1 in 33. It is unlikely that these sites would experience any adverse impacts resulting from the mining induced tilts.

The maximum predicted total curvature for these sites due to mining in the Wambo, Arrowfield and Bowfield Seams, based on the *Modified Layout*, is 3.0 km^{-1} hogging and sagging, which represents a minimum radius of curvature of 0.3 kilometres. The maximum predicted additional curvatures, due to the proposed modification, are 2.5 km^{-1} hogging and 2.9 km^{-1} sagging, which represent minimum radii of curvature of 0.4 kilometres and 0.3 kilometres, respectively.

These sites can potentially be affected by cracking of the surface soils as a result of mine subsidence movements. It is unlikely, however, that the scattered artefacts or isolated finds themselves would be impacted by surface cracking. It is possible, however, that if remediation of the surface was required after mining, that these works could potentially impact these sites.

It is recommended that WCPL seek the required approvals from the appropriate authorities, in the event that remediation of the surface is required in the locations of the artefact scatters and isolated finds.

Further assessments of the potential impacts on the artefact scatters and isolated finds are provided in a report by RPS (2014).

6.15.5. Impact Assessments for the Bleached Sand

The bleached sand is partially located above the finishing (i.e. north-eastern) end of WMLW10A. This area is predicted to experience a maximum tilt of 55 mm/m (i.e. 5.5 %, or 1 in 18) and a maximum curvature of 3.0 km^{-1} (i.e. a minimum radius of curvature of 0.3 kilometres).

It is not expected that any significant surface cracking would occur in the bleached sand due to its unconsolidated nature. It is unlikely, therefore, that the bleached sand would experience any adverse impacts resulting from the extraction WMLW10A.

Further assessments of the potential impacts on the bleached sand are provided in a report by RPS (2014).

6.15.6. Impact Assessments for the Sandstone Outcrops

The sandstone outcrops are located at a minimum distance of 50 metres east of WMLW10A, at their closest points to the proposed longwall. The grinding groove sites are located outside the Study Area and are at a minimum distance of 125 metres from WMLW10A at their closest point.

At these distances, the outcrops and grinding groove sites are predicted to experience less than 20 mm of vertical subsidence. While it is possible that sandstone outcrops could experience very low levels of vertical subsidence, they would not be expected to experience any measurable tilts, curvatures or ground strains.

The section of Wollombi Brook in the vicinity of the proposed longwall has a shallow incision into the alluvium. It is unlikely, therefore, that the sandstone outcrops would experience any significant valley related movements resulting from the extraction of the proposed longwall.

It is unlikely, therefore, that the sandstone outcrops and the associated grinding groove sites would experience any adverse impacts due to the extraction of WMLW10A, even if the predictions were exceeded by a factor of 2.

Further assessments of the potential impacts on the sandstone outcrops and associated grinding groove sites are provided in a report by RPS (2014).

6.16. State Survey Control Marks

The locations and details of the state survey control marks were obtained from the *Land and Property Management Authority* using the *Six Viewer* (2012). There were no state survey control marks identified within or in the immediate vicinity of the Study Area. There were state survey control marks identified further afield, outside the extents of Drawing No. MSEC697-12, which are located at distances greater than 1.5 kilometres from the proposed longwall.

The survey control marks located in the area could be affected by far-field horizontal movements, up to 3 kilometres outside the extents of the proposed longwall. Far-field horizontal movements and the methods used to predict such movements are described further in Sections 4.5 and B.4.

It will be necessary on the completion of the longwalls, when the ground has stabilised, to re-establish any survey control marks that are required for future use. Consultation between WCPL and the Department of Lands will be required to ensure that these survey control marks are reinstated at the appropriate time, as required.

- BUILDING STRUCTURES
- FARM DAMS
- WATER STORAGE DAM
- POWERLINES
- POWER POLES
- WATER PIPELINES
- ROADS & TRACKS
- PHOTOGRAPH AND FIGURE REFERENCE

-  GROUNDWATER BORES
 EXPLORATION BORES
 ARCHAEOLOGICAL SITES
 SCAR TREE
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BUILT FEATURES

DATE:
8-Aug-2014

SCALE:
1:12500

DRAWING No:
MSEC697-12

Rev No
B

Table D.01 - Maximum Predicted Subsidence Parameters for the Archaeological Sites within the Study Area due to Mining in the Wambo, Arrowfield and Bowfield Seams Based on the Approved and Modified Layouts

Site Name	Type	Predicted Total Subsidence Based on the Approved Layout (mm)	Predicted Total Subsidence Based on the Modified Layout (mm)	Incremental Change in Subsidence due to the Proposed Modification (mm)	Predicted Total Tilt Based on the Approved Layout (mm/m)	Predicted Total Tilt Based on the Modified Layout (mm/m)	Incremental Change in Tilt due to the Proposed Modification (mm/m)	Predicted Total Hogging Curvature Based on the Approved Layout (1/km)	Predicted Total Hogging Curvature Based on the Modified Layout (1/km)	Incremental Change in Hogging Curvature due to the Proposed Modification (1/km)	Predicted Total Sagging Curvature Based on the Approved Layout (1/km)	Predicted Total Sagging Curvature Based on the Modified Layout (1/km)	Incremental Change in Sagging Curvature due to the Proposed Modification (1/km)
Site 40	Artefact Scatter	550	600	50	6	8	2	0.10	0.10	0.00	0.03	0.10	0.07
Site 41	Artefact Scatter	300	300	0	4	4	0	0.03	0.04	0.01	0.02	0.02	0.00
Site 42	Artefact Scatter	75	75	0	1	1	0	0.01	0.01	0.00	< 0.01	< 0.01	0.00
Site 336	Artefact Scatter	800	900	100	15	20	5	0.50	0.90	0.40	< 0.01	0.50	0.00
Site 363	Artefact Scatter	500	550	50	6	7	1	0.10	0.10	0.00	< 0.01	< 0.01	0.00
Site 371	Isolated Find	2200	3700	1500	20	20	0	0.50	1.50	1.00	0.10	1.50	1.40
Site 372	Isolated Find	2600	4000	1400	30	20	-10	0.50	1.50	1.00	0.10	1.50	1.40
Site 373	Isolated Find	4500	4500	0	35	35	0	0.10	0.10	0.00	1.00	1.00	0.00
Site 374	Isolated Find	1800	3100	1300	25	55	30	0.50	3.00	2.50	0.10	3.00	2.90
Bleached Sand	-	3700	3700	0	50	55	5	0.70	3.00	2.30	0.80	3.00	2.20
Sandstone Outcrops	-	1900	1900	0	40	40	0	0.70	0.70	0.00	0.40	0.40	0.00
Maximum		4500	4500	1500	50	55	30	0.70	3.00	2.50	1.00	3.00	2.90